

**Flood Control Project Maintenance  
Levee Inspections**  
**LMA District Cover Sheet**  
**Spring 2017 Levee Inspection Results**

**Sutter Maintenance Yard Maintenance Area 0013**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)				

\*\* Non-receipt of Summer or Winter Inspection  
Reports may effect overall annual rating.

† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments


**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Spring 2017 Levee Inspection Results**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway			Bank	Unit Miles
Unit No. 01 Cherokee Canal			Right	18.19
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	5/3/2017 - 5/3/2017			
DWR Inspector	Bob Duffey			
Accompanied By	Shawn Freitag Sutter Maintenance Yard			

**Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

*The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.*

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start		Rating **	A	Issue No.	1
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals				
DWR ID	DWR_MA0013_01_s_2013_1				
Comment Code					
Inspector Comment					
The LMA has the O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	8
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment				
DWR ID	DWR_MA0013_01_s_2013_8				
Comment Code					
Inspector Comment					
The LMA has adequate flood fight supplies and equipment.					

No Photos

LM Start		Rating **	A	Issue No.	16
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training				
DWR ID	DWR_MA0013_01_s_2013_16				
Comment Code					
Inspector Comment					
The LMA completed flood fight training in 2014.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	0.27	Rating **	U	Issue No.	90
LM End	0.27	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.593094 °	39.593094 °
				-121.703570 °	-121.703570 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:50973 DS_ID:16327 EP_NO: 6135 Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/16/2016 Appears no repairs have been made here yet as LS slope is still dug away. (DWR Sutter Yard-AFreitag)4/28/2016 8-inch pipe was running water but was leaking at a weld joint on the LS slope. Pipe appears to have been dug out by the landowner but unsure if repairs are being made yet. (see photo 5)7/14/2015 Pipe end is still welded solid.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection. FIELD_STRUCT_DESC: 8-inch steel irrigation pipe through the levee 2.8 feet below the crown. Permit requirements are as follow: during the flood season the 5-inch irrigation pipe will be removed and a plate bolted over the waterside (WS) end of the 8-inch. Pipe section is completely buried. Current configuration does not allow for 5-inch irrigation pipe to slide pipe through. 8-inch pipe is welded solid. (Permit No. 6135, 1968 - George Washington) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 11/28/2016 8:45:31 AM					

LM Start	<b>0.27</b>	Rating **	U	Issue No.	<b>90 (cont)</b>
LM End	<b>0.27</b>	Issue Type +	En	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_50973\_66680.jpg



Overview of the crossing.

Photo 2 of 3 : UCIP\_SP\_2017\_50973\_66683.jpg



Air Vent located on WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	0.27	Rating **	U	Issue No.	90 (cont)
LM End	0.27	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.593094 °	39.593094 °
				-121.703570 °	-121.703570 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:50973 DS_ID:16327 EP_NO: 6135 Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/16/2016 Appears no repairs have been made here yet as LS slope is still dug away. (DWR Sutter Yard-AFreitag)4/28/2016 8-inch pipe was running water but was leaking at a weld joint on the LS slope. Pipe appears to have been dug out by the landowner but unsure if repairs are being made yet. (see photo 5)7/14/2015 Pipe end is still welded solid.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection. FIELD_STRUCT_DESC: 8-inch steel irrigation pipe through the levee 2.8 feet below the crown. Permit requirements are as follow: during the flood season the 5-inch irrigation pipe will be removed and a plate bolted over the waterside (WS) end of the 8-inch. Pipe section is completely buried. Current configuration does not allow for 5-inch irrigation pipe to slide pipe through. 8-inch pipe is welded solid. (Permit No. 6135, 1968 - George Washington) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 11/28/2016 8:45:31 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_50973\_66681.jpg



Air vent and gate located in channel. Unable to determine if part of crossing.

LM Start	0.46	Rating **	M	Issue No.	89
LM End	0.46	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.591162 °	39.591162 °
				-121.701820 °	-121.701820 °
DWR ID	DWR_MA0013_01_s_2017_89				
Comment Code					
PR : Prunings					
Inspector Comment					
Remove the prunings from the landside slope.					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_89\_20170508\_00145.jpg



View of prunings along the landside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	0.63	Rating **	M	Issue No.	46
LM End	0.63	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.589337 °	39.589337 °
				-121.700604 °	-121.700604 °
DWR ID	DWR_MA0013_01_f_2016_46				
Comment Code					
PR : Prunings					
Inspector Comment					
Remove the prunings from the landside toe.					

No Photos

LM Start	0.63	Rating **	M	Issue No.	14
LM End	1.17	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.589272 °	39.581472 °
				-121.700599 °	-121.700518 °
DWR ID	DWR_MA0013_01_s_2012_14				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

LM Start	0.73	Rating **	M	Issue No.	12
LM End	0.76	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.587905 °	39.587505 °
				-121.700822 °	-121.700880 °
DWR ID	DWR_MA0013_01_s_2012_12				
Comment Code					
EQ : Equipment					
Inspector Comment					
Remove the equipment from the landside toe.					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_12\_20170315\_00005.jpg



View of the equipment along the landside toe of the levee.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	0.87	Rating **	C	Issue No.	44
LM End	0.87	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.585857 °	39.585857 °
				-121.700540 °	-121.700540 °
DWR ID	DWR_MA0013_01_s_2015_44				
Comment Code					
PR : Prunings					
Inspector Comment					
The prunings were removed from the landside slope.					

No Photos

LM Start	0.94	Rating **	M	Issue No.	20
LM End	0.94	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.584885 °	39.584885 °
				-121.700487 °	-121.700487 °
DWR ID	DWR_MA0013_01_s_2013_20				
Comment Code					
PR : Prunings					
Inspector Comment					
Remove prunings from the landside toe.					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_20\_20170315\_00007.jpg



View of the prunings along the landside toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	1.13	Rating **	A/W	Issue No.	91
LM End	1.13	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.582147 °	39.582147 °
				-121.700540 °	-121.700540 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:50975  
DS\_ID:16343  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection.4/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the crossing.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS). Flap gate on the WS end.  
[Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.15)]  
FS Date: 11/28/2016 8:52:29 AM

LM Start	<b>1.13</b>	Rating **	A/W	Issue No.	<b>91 (cont)</b>
LM End	<b>1.13</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_50975\_66689.jpg



Overview of levee crown at crossing looking D/S .

Photo 2 of 3 : UCIP\_SP\_2017\_50975\_66688.jpg



View of WS headwall and flap gate.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	1.13	Rating **	A/W	Issue No.	91 (cont)	
LM End	1.13	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.582147 °	39.582147 °	
				-121.700540 °	-121.700540 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:50975 DS_ID:16343 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/10/2013 Same as last inspection.4/17/2012 Drain is still in use. 4 inch pipe in channel near WS headwall (see photo). The pipe does not appear to impact the crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS). Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.15)] FS Date: 11/28/2016 8:52:29 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_50975\_66687.jpg



View of WS with pipe in channel.

LM Start	1.17	Rating **	M	Issue No.	52
LM End	1.24	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.581441 °	39.581385 °
				-121.700532 °	-121.701560 °
DWR ID	DWR_MA0013_01_f_2016_52				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_52\_20170315\_00010.jpg



View of the vegetation along the landside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	1.59	Rating **	U	Issue No.	92
LM End	1.59	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.576883 °	39.576883 °
				-121.702770 °	-121.702770 °
DWR ID					

Comment Code
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Inspector Comment
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FS\_ID:50976  
DS\_ID:16831  
EP\_NO: N/A  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)  
4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana)  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]  
FS Date: 11/28/2016 9:12:52 AM

Photo 1 of 3 : UCIP\_SP\_2017\_50976\_66695.jpg



Overview of levee crown at crossing looking downstream.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

## Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

FS\_ID:50976  
 DS\_ID:16831  
 EP\_NO: N/A  
 Repair Type: Urgent  
 Crossing Status: Found  
 UCIP Comments: 11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)  
 4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - aFreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - aFreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - aFreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - aFreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana)  
 FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Slide gate in corrugated metal pipe (CMP) riser on the WS slope. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.62)]  
 FS Date: 11/28/2016 9:12:52 AM

Corrugated metal riser with slide gate located on WS slope.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

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Levee Inspections**

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	1.59	Rating **	U	Issue No.	92 (cont)
LM End	1.59	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.576883 °	39.576883 °
				-121.702770 °	-121.702770 °

**Comment Code**

**Inspector Comment**

FS\_ID:50976  
DS\_ID:16831  
EP\_NO: N/A  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 WS structures still removed. (DWR Sutter Yard- AFreitag)10/17/2016 Landowner removed WS concrete headwall and pipe section through floodway to make room for orchard. The area disturbed appears to be from WS toe to where the mature trees are located within floodway, approximately 45 feet from WS toe. Crossing is classified as Urgent with potential levee integrity issues due to the disturbance of the WS without prior approval from the CVFPB. (DWR UCIP - omagana)  
4/28/2016 Landowner appears to have removed the WS headwall and pipe to make room for planting more orchard trees. LS pipe end was full of water as it has no where to drain to anymore. Changing to urgent listing but it currently does not affect the levee integrity. (see photos 8, 9, & 10) (DWR Sutter Yard - afreitag)7/14/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition. (DWR Sutter Yard - afreitag) 4/17/2012 Pipe collapse on WS 10 feet from toe, needs repair. From WS, sediment is visible inside pipe. (DWR UCIP - omagana)  
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FS Date: 11/28/2016 9:12:52 AM

Photo 3 of 3 : UCIP\_SP\_2017\_50976\_66698.jpg



WS headwall, rock protection, and outlet blocked by shrub.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	<b>N : Not Inspected/Rated</b> C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspections**

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**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	1.66	Rating **	M	Issue No.	93 (cont)	
LM End	1.66	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			39.575816 °	39.575816 °	
				-121.702900 °	-121.702900 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:50977 DS_ID:16345 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 PVC pipe still present blocking the screw gate. (DWR Sutter Yard- A Freitag)4/28/2016 Pvc pipe is still present through the crossing. Slide gate cannot shut fully.7/14/2015 4-inch pipe still present and blocking the screw gate.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete headwall on the landside (LS). 36-inch concrete standpipe in the channel with 2 piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.69)] FS Date: 11/28/2016 9:13:39 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_50977\_66702.jpg



Positive closure device on WS slope, panel lid fell in.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	<b>2.31</b>	Rating **	M	Issue No.	<b>94</b>
LM End	<b>2.31</b>	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		39.566433 °	39.566433 °	
			-121.703750 °	-121.703750 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:50978  
DS\_ID:16346  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Appears abandoned. Unable to find anything on LS. (DWR Sutter Yard- A Freitag)4/28/2016 Appears to be an abandoned crossing. LS headwall and pipe inlet are still completely buried.7/14/2015 Still cannot find an inlet or outlet.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0119 for no inlet or outlet visible. FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Pipe continues across channel. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.35)]  
FS Date: 11/28/2016 9:14:42 AM

LM Start	<b>2.31</b>	Rating **	M	Issue No.	<b>94 (cont)</b>
LM End	<b>2.31</b>	Issue Type +	En	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_50978\_66708.jpg



Overview of crossing looking DS.

Photo 2 of 3 : UCIP\_SP\_2017\_50978\_66709.jpg



Corrugated riser located on WS slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	2.31	Rating **	M	Issue No.	94 (cont)
LM End	2.31	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.566433 °	39.566433 °
				-121.703750 °	-121.703750 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:50978 DS_ID:16346 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 Appears abandoned. Unable to find anything on LS. (DWR Sutter Yard- A Freitag)4/28/2016 Appears to be an abandoned crossing. LS headwall and pipe inlet are still completely buried.7/14/2015 Still cannot find an inlet or outelt.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0119 for no inlet or outlet visible. FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Pipe continues across channel. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.35)] FS Date: 11/28/2016 9:14:42 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_50978\_66707.jpg



Corrugated metal riser on WS slope. Lid panel blocking gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	2.70	Rating **	A/W	Issue No.	95	
LM End	2.70	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.561130 °	39.561130 °	
				-121.705140 °	-121.705140 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:50979 DS_ID:16347 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Vegetation/sedimentation from WS has been removed. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0130 for WS flap gate closed and blocked by sediment. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.4 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.74)] FS Date: 11/28/2016 9:16:38 AM						

LM Start	<b>2.70</b>	Rating **	A/W	Issue No.	<b>95 (cont)</b>
LM End	<b>2.70</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_50979\_66715.jpg



Overview of levee crown looking downstream at crossing.

Photo 2 of 3 : UCIP\_SP\_2017\_50979\_66714.jpg



Flap gate at WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	2.70	Rating **	A/W	Issue No.	95 (cont)	
LM End	2.70	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.561130 °		39.561130 °
				-121.705140 °		-121.705140 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:50979 DS_ID:16347 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 Vegetation/sedimentation from WS has been removed. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0130 for WS flap gate closed and blocked by sediment. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.4 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.74)] FS Date: 11/28/2016 9:16:38 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_50979\_66711.jpg



View of channel.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	3.05	Rating **	M	Issue No.	96
LM End	3.05	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.556310 °	39.556310 °
				-121.706470 °	-121.706470 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:50980  
DS\_ID:17372  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard- AFreitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that discharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0157 for WS and LS inlet/outlet blocked by sediment.  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flapgate is located on the waterside (WS). Concrete headwall located located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]  
FS Date: 11/28/2016 9:44:54 AM

LM Start	<b>3.05</b>	Rating **	M	Issue No.	<b>96 (cont)</b>
LM End	<b>3.05</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_50980\_66718.jpg



Overview of levee crown looking downstream at crossing.

Photo 2 of 3 : UCIP\_SP\_2017\_50980\_66716.jpg



WS levee slope.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	3.05	Rating **	M	Issue No.	96 (cont)	
LM End	3.05	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.556310 °	39.556310 °	
				-121.706470 °	-121.706470 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:50980						
DS_ID:17372						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: 11/16/2016 Pipe about 50% full of sediment. (DWR Sutter Yard- A Freitag)4/28/2016 Pipe on LS is about 50% full of sediment. There is now a concrete pipe that discharges into the LS inlet of this crossing. Not sure where the concrete pipe comes from.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Pipe section was dug up and repaired. Crossing is now in good condition.7/15/2013 Pipe appears to have a possible hole in top of pipe about 10ft. in from LS headwall.4/17/2012 LS headwall blocked by sediment (50 % of opening is covered). LS floor is higher than LS pipe invert. WS headwall has been recently cleared of vegetation and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0157 for WS and LS inlet/outlet blocked by sediment.						
FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.8 feet below the crown. Flapgate is located on the waterside (WS). Concrete headwall located located on the landside (LS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 3.10)]						
FS Date: 11/28/2016 9:44:54 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_50980\_66720.jpg



Flap gate on waterside.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	3.05	Rating **	M	Issue No.	97
LM End	3.05	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.556276 °	39.556276 °
				-121.706510 °	-121.706510 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:50981 DS_ID:16348 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 11/16/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/28/2016 Unable to locate.7/14/2015 Unable to locate.5/21/2014 Same as last inspection.12/2/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate.4/18/2012 Crossing not visible during the Spring 2012 Inspection. Attempt to find crossing during next inspection when slopes are cleared of vegetation. FIELD_STRUCT_DESC: 24-inch drainage pipe through the levee at an unknown depth below the crown. Concrete headwall on both waterside (WS) and landside (LS) ends. Flap gate located on the WS end. [Additional Reference(s): DWR Levee Log, 1993] FS Date: 11/28/2016 9:47:48 AM					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

FS\_ID:50982  
DS\_ID:16349  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- AFreitag)4/28/2016 Sediment build up on both gates blocking them from operating properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional.4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.29)]  
FS Date: 11/28/2016 10:01:28 AM

Flap gate on WS.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	3.24	Rating **	M	Issue No.	98 (cont)	
LM End	3.24	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.553490 °	39.553490 °	
				-121.706680 °	-121.706680 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:50982 DS_ID:16349 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 Both gates closed but partially buried and unable to open. (DWR Sutter Yard- A Freitag)4/28/2016 Sediment build up on both gates blocking them from operating properly.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Stem on LS screw gate has been replaced and is now full functional.4/17/2012 LS slide gate stem is bent and prevents gate from fully closing. Both WS and LS have been cleared of debris and sediment. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0162 for inoperable gates on WS & LS due to sediment and grass blocking inlet and outlet. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.9 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate visible on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.29)] FS Date: 11/28/2016 10:01:28 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_50982\_66726.jpg



Recent sediment removal on WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable  N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

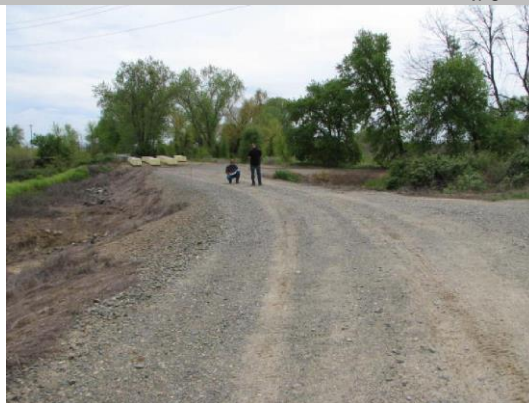
**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	3.27	Rating **	A/W	Issue No.	99
LM End	3.27	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.553129°	39.553129°
				-121.706640°	-121.706640°
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:50983 DS_ID:16350 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 WS headwall has been cleared of debris and sedimentation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.31)] FS Date: 11/28/2016 10:04:46 AM					

Photo 1 of 3 : UCIP\_SP\_2017\_50983\_66731.jpg



Overview of levee crown at crossing.

LM Start	<b>3.27</b>	Rating **	A/W	Issue No.	<b>99 (cont)</b>
LM End	<b>3.27</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : UCIP\_SP\_2017\_50983\_66730.jpg



View of WS flap gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	3.27	Rating **	A/W	Issue No.	99 (cont)
LM End	3.27	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.553129 °	39.553129 °
				-121.706640 °	-121.706640 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:50983 DS_ID:16350 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/17/2012 WS headwall has been cleared of debris and sedimentation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.31)] FS Date: 11/28/2016 10:04:46 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_50983\_66732.jpg



Sedimentation cleared on WS.

LM Start	3.70	Rating **	M	Issue No.	69
LM End	3.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.546910 °	39.546333 °
				-121.707635 °	-121.707518 °
DWR ID	DWR_MA0013_01_f_2016_69				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	<b>3.72</b>	Rating **	A/W	Issue No.	<b>100</b>
LM End	<b>3.72</b>	Issue Type +	Ma	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.546592 °	39.546592 °	
			-121.707560 °	-121.707560 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:50984  
DS\_ID:16351  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/28/2016 Both sides of the crossing were underwater during time of inspection. 7/14/2015 Crossing appears in good condition. No noticeable issues to report. 5/21/2014 Same as last inspection. 12/2/2013 Same as last inspection. 7/15/2013 Slopes have been cleared of vegetation and are in good condition. 4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.  
FIELD\_STRUCT\_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.80)]  
FS Date: 11/28/2016 10:05:20 AM

LM Start	<b>3.72</b>	Rating **	A/W	Issue No.	<b>100 (cont)</b>
LM End	<b>3.72</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_50984\_66736.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3 : UCIP\_SP\_2017\_50984\_66738.jpg



WS slope covered by dense vegetation.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	3.72	Rating **	A/W	Issue No.	100 (cont)	
LM End	3.72	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.546592 °	39.546592 °	
				-121.707560 °	-121.707560 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:50984 DS_ID:16351 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Both sides of the crossing were underwater during time of inspection.7/14/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes. FIELD_STRUCT_DESC: 24-inch corrugate metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.80)] FS Date: 11/28/2016 10:05:20 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_50984\_66735.jpg



WS flap gate

LM Start	3.73	Rating **	M	Issue No.	51
LM End	3.73	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.546465 °	39.546465 °
				-121.707530 °	-121.707530 °
DWR ID	DWR_MA0013_01_s_2016_51				
Comment Code					
EQ : Equipment					
Inspector Comment					
Remove ag equipment from the toe of slope.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	3.74	Rating **	M	Issue No.	101
LM End	3.74	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.546317 °	39.546317 °
				-121.707510 °	-121.707510 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:50985  
DS\_ID:16365  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Both LS and WS gates buried. (DWR Sutter Yard- A Freitag) 4/28/2016 Abandoned crossing. LS screw is still bent and mostly buried. 7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional. 5/21/2014 Same as last inspection. 12/2/2013 Same as last inspection. 7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over. 4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes.  
FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.82)]  
FS Date: 11/28/2016 10:05:45 AM

LM Start	<b>3.74</b>	Rating **	M	Issue No.	<b>101 (cont)</b>
LM End	<b>3.74</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_50985\_66743.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3 : UCIP\_SP\_2017\_50985\_66741.jpg



WS flap gate blocked by debris.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	3.74	Rating **	M	Issue No.	101 (cont)
LM End	3.74	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.546317 °	39.546317 °
				-121.707510 °	-121.707510 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:50985 DS_ID:16365 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 Both LS and WS gates buried. (DWR Sutter Yard- AFreitag)4/28/2016 Abandoned crossing. Ls screw is still bent and mostly buried. 7/14/2015 LS screw gate is still damaged and buried. Crossing is non-functional.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over.4/18/2012 LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes. FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.82)] FS Date: 11/28/2016 10:05:45 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_50985\_66742.jpg



LS slide gate covered with silt. Slide gate is bent.

LM Start	4.06	Rating **	M	Issue No.	18
LM End	4.13	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.541660 °	39.540651 °
				-121.707408 °	-121.707404 °
DWR ID	DWR_MA0013_01_s_2013_18				
Comment Code					
V6 : Landscaping					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_18\_20170315\_00006.jpg



View of the redwood trees along the landside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	4.15	Rating **	M	Issue No.	68
LM End	4.26	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.540428 °	39.538823 °
				-121.707423 °	-121.707449 °
DWR ID	DWR_MA0013_01_f _ 2016_68				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	4.35	Rating **	A/W	Issue No.	102
LM End	4.35	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.537516 °	39.537516 °
				-121.707580 °	-121.707580 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:50988					
DS_ID:16341					
EP_NO: N/A					
Repair Type: No Action Needed					
Crossing Status: Found					
UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0189 for sediment and grass blocking WS and LS.					
FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.43)]					
FS Date: 11/28/2016 10:46:26 AM					

Photo 1 of 3 : UCIP\_SP\_2017\_50988\_66752.jpg



Overview of levee crown at crossing looking upstream.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	<b>4.35</b>	Rating **	A/W	Issue No.	<b>102 (cont)</b>
LM End	<b>4.35</b>	Issue Type +	Ma	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.537516°	39.537516°	
			-121.707580°	-121.707580°	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:50988  
DS\_ID:16341  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/28/2016 Crossing appears to be in good condition. 7/13/2015 Crossing appears in good condition. No noticeable issues to report. 5/21/2014 Same as last inspection. 12/2/2013 Same as last inspection. 7/15/2013 Same as last inspection. 4/18/2012 Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0189 for sediment and grass blocking WS and LS.  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.1 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.43)]  
FS Date: 11/28/2016 10:46:26 AM

LM Start	<b>4.35</b>	Rating **	A/W	Issue No.	<b>102 (cont)</b>
LM End	<b>4.35</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : UCIP\_SP\_2017\_50988\_66753.jpg



View of WS slope and toe.

Photo 3 of 3 : UCIP\_SP\_2017\_50988\_66750.jpg



View of WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	4.85	Rating **	A/W	Issue No.	103
LM End	4.85	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.530220 °	39.530220 °
				-121.707940 °	-121.707940 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:50989  
DS\_ID:16355  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/28/2016 Crossing appears to be in good condition. 7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition. 5/21/2014 Same as last inspection. 12/2/2013 Same as last inspection. 7/15/2013 No signs of burrowing activity on this inspection. 4/18/2012 Burrow activity near crossing, burrow holes present on WS slope.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee 7.7 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.94)]  
FS Date: 11/28/2016 10:48:17 AM

LM Start	<b>4.85</b>	Rating **	A/W	Issue No.	<b>103 (cont)</b>
LM End	<b>4.85</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_50989\_66756.jpg



Overview of levee crown at crossing looking downstream at right bank of Cherokee Canal.

Photo 2 of 3 : UCIP\_SP\_2017\_50989\_66758.jpg



Burrow activity on WS slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	4.85	Rating **	A/W	Issue No.	103 (cont)
LM End	4.85	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.530220 °	39.530220 °
				-121.707940 °	-121.707940 °
DWR ID					

Comment Code

Inspector Comment

FS\_ID:50989  
DS\_ID:16355  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 No signs of burrowing activity on this inspection.4/18/2012 Burrow activity near crossing, burrow holes present on WS slope.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee 7.7 feet below the crown. Flap gate on the waterside (WS) end. Slide gate located on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.94)]  
FS Date: 11/28/2016 10:48:17 AM

Photo 3 of 3 : UCIP\_SP\_2017\_50989\_66755.jpg



View of WS flap gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	5.33	Rating **	A/W	Issue No.	104
LM End	5.33	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.523236 °	39.523236 °
				-121.707650 °	-121.707650 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:50990  
DS\_ID:16356  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/28/2016 Crossing appears to be in good condition. 7/13/2015 LS screw gate was completely submerged and WS flapgate was propped open by a wood block but crossing appears to be in good condition. 5/21/2014 Same as last inspection. 12/2/2013 Same as last inspection. 7/15/2013 Same as last inspection. 4/18/2012 Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0204 for restriction view of gates. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.43)]  
FS Date: 11/28/2016 10:49:24 AM

LM Start	<b>5.33</b>	Rating **	A/W	Issue No.	<b>104 (cont)</b>
LM End	<b>5.33</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_50990\_66762.jpg



Overview of levee crown at crossing looking D/S on right bank of Cherokee Canal.

Photo 2 of 3 : UCIP\_SP\_2017\_50990\_66760.jpg



WS Flap Gate

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	5.33	Rating **	A/W	Issue No.	104 (cont)	
LM End	5.33	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.523236 °	39.523236 °	
				-121.707650 °	-121.707650 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:50990 DS_ID:16356 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged and WS flapgate was propped open by a wood block but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0204 for restriction view of gates. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.43)] FS Date: 11/28/2016 10:49:24 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_50990\_66763.jpg



WS view of outlet cleared of vegetation.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	<b>5.38</b>	Rating **	M	Issue No.	<b>105 (cont)</b>
LM End	<b>5.38</b>	Issue Type +	Ma	Location *	LS

A white pickup truck is driving away from the viewer on a wide, gravel-covered road. The road is flanked by tall, dry, yellowish-brown grass. In the background, there are green trees and a clear blue sky. The truck has a black rack in the bed and a license plate that is partially visible.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	5.38	Rating **	M	Issue No.	105 (cont)	
LM End	5.38	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.522566 °	39.522566 °	
				-121.707560 °	-121.707560 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:50992 DS_ID:16357 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 WS flap gate closed but blocked from opening by sediment. (DWR Sutter Yard- AFreitag)4/28/2016 WS flap gate blocked from opening by sediment.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls an both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.48)] FS Date: 11/28/2016 10:50:24 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_50992\_66768.jpg



View of WS flap gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	5.63	Rating **	M	Issue No.	106
LM End	5.63	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.519212 °	39.519212 °
				-121.709030 °	-121.709030 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51018  
DS\_ID:16359  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 WS still completely buried. (DWR Sutter Yard- A Freitag) 4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok. 7/13/2015 Both the LS screw gate and WS flapgate are completely buried. 5/21/2014 Same as last inspection. 12/2/2013 Same as last inspection. 7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear. 4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13D\_2011\_p\_0210 for WS gate submerged.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.73)]  
FS Date: 11/30/2016 7:01:02 AM

LM Start	<b>5.63</b>	Rating **	M	Issue No.	<b>106 (cont)</b>
LM End	<b>5.63</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51018\_66793.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3 : UCIP\_SP\_2017\_51018\_66794.jpg



View of WS slope and toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	5.63	Rating **	M	Issue No.	106 (cont)	
LM End	5.63	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.519212 °	39.519212 °	
				-121.709030 °	-121.709030 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51018 DS_ID:16359 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 WS still completely buried. (DWR Sutter Yard- A Freitag) 4/28/2016 WS gate and headwall are buried. Only the top of the headwall was visible. LS appeared ok.7/13/2015 Both the LS screw gate and WS flapgate are completely buried.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear.4/18/2012 High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13D_2011_p_0210 for WS gate submerged. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.73)] FS Date: 11/30/2016 7:01:02 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51018\_66791.jpg



View of WS flap gate buried.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable  N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	5.87	Rating **	A/W	Issue No.	107
LM End	5.87	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.516059 °	39.516059 °
				-121.710810 °	-121.710810 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51019  
DS\_ID:16360  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Burrow activity near crossing; burrow holes present on LS.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 6.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.97)]  
FS Date: 11/30/2016 7:04:27 AM

LM Start	<b>5.87</b>	Rating **	A/W	Issue No.	<b>107 (cont)</b>
LM End	<b>5.87</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51019\_66800.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3 : UCIP\_SP\_2017\_51019\_66801.jpg



View of WS slope and toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	5.87	Rating **	A/W	Issue No.	107 (cont)	
LM End	5.87	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.516059 °	39.516059 °	
				-121.710810 °	-121.710810 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51019 DS_ID:16360 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS screw gate was completely submerged but crossing appears to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Burrow activity near crossing; burrow holes present on LS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 6.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.97)] FS Date: 11/30/2016 7:04:27 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51019\_66799.jpg



Flap gate WS

LM Start	6.17	Rating **	M	Issue No.	67
LM End	6.17	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.512157 °	39.512157 °
				-121.713171 °	-121.713171 °
DWR ID	DWR_MA0013_01_f _ 2016_67				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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## Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

FS\_ID:51020  
DS\_ID:16361  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 LS screwgate is buried and non-operational. (DWR Sutter Yard- AFreitag)4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.34)]  
FS Date: 11/30/2016 7:08:13 AM

Overview of levee crown at crossing looking downstream.

View of WS slope and toe.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	6.23	Rating **	M	Issue No.	108 (cont)	
LM End	6.23	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.511337 °	39.511337 °	
				-121.713620 °	-121.713620 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51020 DS_ID:16361 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 LS screwgate is buried and non-operational. (DWR Sutter Yard- A Freitag)4/28/2016 LS screwgate is still completely buried. 7/13/2015 LS screw gate is completely buried.5/21/2014 Same as last inspection.7/15/2013 WS slope has been cleared of vegetation and is in good condition. LS screw gate is still buried.12/2/2013 Same as last inspection.4/18/2012 LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.4 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.34)] FS Date: 11/30/2016 7:08:13 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51020\_66804.jpg



View of WS flap gate.

LM Start	6.41	Rating **	M	Issue No.	3
LM End	6.99	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.508928 °	39.501438 °
				-121.714842 °	-121.719715 °
DWR ID	DWR_MA0013_01_s_2012_3				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_3\_20170315\_00002.jpg



View of the agricultural ditch along the toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	6.45	Rating **	U	Issue No.	109
LM End	6.45	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.508309 °	39.508309 °
				-121.715100 °	-121.715100 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51021  
DS\_ID:16362  
EP\_NO: 5200B  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Hole/erosion still present behind the LS flashboards. (DWR Sutter Yard- A Freitag)4/28/2016 Hole still present behind the LS flashboards. Rest of the crossing appeared in good condition. (DWR Sutter Yard - a Freitag)7/13/2015 Hole still present behind the LS flashboards. (DWR Sutter Yard - a Freitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - a Freitag)12/2/2013 Same as last inspection. (DWR Sutter Yard - a Freitag)7/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS. (DWR Sutter Yard - a Freitag)4/18/2012 Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS. (DWR UCIP - omagana)  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends (Permit No. 5200B - 1965, Richvale Irrigation District) (Additional Related Permit(s): Permit No. 5200 and 5200A) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.56)]  
FS Date: 11/30/2016 7:09:30 AM

LM Start	<b>6.45</b>	Rating **	U	Issue No.	<b>109 (cont)</b>
LM End	<b>6.45</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51021\_66814.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3 : UCIP\_SP\_2017\_51021\_66813.jpg



View of WS slope and toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	6.45	Rating **	U	Issue No.	109 (cont)
LM End	6.45	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.508309 °	39.508309 °
				-121.715100 °	-121.715100 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51021 DS_ID:16362 EP_NO: 5200B Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/16/2016 Hole/erosion still present behind the LS flashboards. (DWR Sutter Yard- AFreitag)4/28/2016 Hole still present behind the LS flashboards. Rest of the crossing appeared in good condition. (DWR Sutter Yard - afreitag)7/13/2015 Hole still present behind the LS flashboards. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/2/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on LS. (DWR Sutter Yard - afreitag)4/18/2012 Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on WS. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends (Permit No. 5200B - 1965, Richvale Irrigation District) (Additional Related Permit(s): Permit No. 5200 and 5200A) [Additional Reference(s): DWR Levee Log, 1992. USACE Sacramento O&M Manual 519, June 1962 (HLM 6.56)] FS Date: 11/30/2016 7:09:30 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_51021\_66811.jpg



WS flap gate.

LM Start	6.53	Rating **	M	Issue No.	2
LM End	6.53	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.507337 °	39.507337 °
				-121.715693 °	-121.715693 °
DWR ID	DWR_MA0013_01_s_2012_2				
Comment Code					
MA : Material					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_2\_20170315\_00001.jpg



View of a concrete block along the toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	6.99	Rating **	M	Issue No.	110
LM End	6.99	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.501479 °	39.501479 °
				-121.719710 °	-121.719710 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51028  
DS\_ID:16329  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Needs a new screw gate installed on the LS. (DWR Sutter Yard- A Freitag)4/28/2016 LS slide gate is still bent. Everything else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.10)]  
FS Date: 11/30/2016 7:16:33 AM

LM Start	<b>6.99</b>	Rating **	M	Issue No.	<b>110 (cont)</b>
LM End	<b>6.99</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51028\_66833.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3 : UCIP\_SP\_2017\_51028\_66832.jpg



View of WS slope and toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	6.99	Rating **	M	Issue No.	110 (cont)
LM End	6.99	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.501479 °	39.501479 °
				-121.719710 °	-121.719710 °
DWR ID					

Photo 3 of 3 : UCIP\_SP\_2017\_51028\_66837.jpg



WS Flap Gate

Comment Code					
Inspector Comment					
FS_ID:51028 DS_ID:16329 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 Needs a new screw gate installed on the LS. (DWR Sutter Yard- A Freitag)4/28/2016 LS slide gate is still bent. Everything else with the crossing appeared ok.7/13/2015 LS screw gate needs to be replaced. Everything else with crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged.4/18/2012 LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.10)] FS Date: 11/30/2016 7:16:33 AM					

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	7.22	Rating **	A/W	Issue No.	111
LM End	7.22	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.498845 °	39.498845 °
				-121.722440 °	-121.722440 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51029  
DS\_ID:16354  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/16/2016 SCrew gate stem bent but gate is still operational. (DWR Sutter Yard- A Freitag)4/28/2106 Tested positive closure device the bent stem on the slide gate did not seem to affect its functions. Gate operable.7/13/2015 LS screw gate stem is still bent. Gate should still be able to close fully. The rest of the crossing seems to be in good condition.5/21/2014 Same as last inspection.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0244 for submerged WS gate. FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)]  
FS Date: 11/30/2016 7:28:38 AM

LM Start	<b>7.22</b>	Rating **	A/W	Issue No.	<b>111 (cont)</b>
LM End	<b>7.22</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51029\_66844.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3 : UCIP\_SP\_2017\_51029\_66845.jpg



View of WS slope and toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	7.22	Rating **	A/W	Issue No.	111 (cont)
LM End	7.22	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.498845 °	39.498845 °
				-121.722440 °	-121.722440 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51029 DS_ID:16354 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 SCrew gate stem bent but gate is still operational.12/2/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent.4/18/2012 LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE_CESPK_M13D_2011_p_0244 for submerged WS gate. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.34)] FS Date: 11/30/2016 7:28:38 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_51029\_66842.jpg



WS Flap Gate

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	7.46	Rating **	A/W	Issue No.	112
LM End	7.46	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.496146 °	39.496146 °
				-121.725160 °	-121.725160 °

**Comment Code**

**Inspector Comment**

FS\_ID:51030  
DS\_ID:16352  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/28/2016 Crossing appears to be in good condition. 7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some. 5/21/2014 Same as last inspection. 12/2/2013 Same as last inspection. 7/15/2013 Slopes have been cleared of vegetation and are in good condition. 4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.58)]  
FS Date: 11/30/2016 7:32:13 AM

LM Start	<b>7.46</b>	Rating **	A/W	Issue No.	<b>112 (cont)</b>
LM End	<b>7.46</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51030\_66853.jpg



View of levee crown at crossing looking D/S.

Photo 2 of 3 : UCIP\_SP\_2017\_51030\_66851.jpg



WS view of slope and channel.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	7.46	Rating **	A/W	Issue No.	112 (cont)	
LM End	7.46	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.496146 °	39.496146 °	
				-121.725160 °	-121.725160 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51030						
DS_ID:16352						
EP_NO: N/A						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/28/2016 Crossing appears to be in good condition. 7/13/2015 WS ditch is getting to be heavily vegetated but it is not yet affecting flap gate operation. Vegetation needs to be cleared back some. 5/21/2014 Same as last inspection. 12/2/2013 Same as last inspection. 7/15/2013 Slopes have been cleared of vegetation and are in good condition. 4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.						
FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Screw gate on the landside (LS) end. Concrete headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.58)]						
FS Date: 11/30/2016 7:32:13 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51030\_66849.jpg



View of WS flap gate. Dense vegetation on WS slope.

LM Start	7.62	Rating **	M	Issue No.	66
LM End	7.62	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.494045 °	39.494045 °
				-121.726420 °	-121.726420 °
DWR ID	DWR_MA0013_01_f_2016_66				
Comment Code					
DE : Debris					
Inspector Comment					
Remove the tires from the waterside slope.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	<b>7.64</b>	Rating **	A/W	Issue No.	<b>113 (cont)</b>
LM End	<b>7.64</b>	Issue Type +	Ma	Location *	WS

A small, weathered wooden boat is beached on a gravelly shore. The boat has a prominent wooden steering wheel mounted on its stern. The surrounding area is dry and rocky, with sparse green vegetation and a few small trees in the background.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	7.64	Rating **	A/W	Issue No.	113 (cont)	
LM End	7.64	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.493756 °	39.493756 °	
				-121.726570 °	-121.726570 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51033 DS_ID:16320 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 The bottom of the entire pipe has about 8inch of sediment in it. Sediment is preventing the screw gate from fully closing. WS flap gate seems to be in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection. FIELD_STRUCT_DESC: 48-inch corrugated metal drainage pipe through the levee, 9.9 feet below the crown. Flap gate on the waterside (WS) end. Slide gate in corrugated metal pipe riser on the WS slope. Concrete "U" headwalls on both ends. Spillway grouted for 35 feet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 7.76)] FS Date: 11/30/2016 7:43:17 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51033\_66863.jpg



WS Slide gate

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	8.00	Rating **	A/W	Issue No.	114 (cont)	
LM End	8.00	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.489061 °	39.489061 °	
				-121.729430 °	-121.729430 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51034 DS_ID:16321 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition. 7/13/2015 Crossing appears to be in good condition. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection. 7/15/2013 Same as last inspection.4/18/2012 Sediment build up against flashboards. Flashboards are in use on landside of levee. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.12)] FS Date: 11/30/2016 7:47:54 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51034\_66869.jpg



WS Flap gate

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	8.27	Rating **	M	Issue No.	115
LM End	8.27	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.485432 °	39.485432 °
				-121.731590 °	-121.731590 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51035 DS_ID:16322 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 WS falp gate is closed but is blocked from opening by sediment. (DWR Sutter Yard- A/Freitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.4/18/2012 Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.40)] FS Date: 11/30/2016 7:50:53 AM					

LM Start	<b>8.27</b>	Rating **	M	Issue No.	<b>115 (cont)</b>
LM End	<b>8.27</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51035\_66876.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3 : UCIP\_SP\_2017\_51035\_66874.jpg



View of WS slope and toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	8.27	Rating **	M	Issue No.	115 (cont)	
LM End	8.27	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.485432 °	39.485432 °	
				-121.731590 °	-121.731590 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51035 DS_ID:16322 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 WS falp gate is closed but is blocked from opening by sediment. (DWR Sutter Yard- AFreitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Minor sediment build up blocking flap gate from opening on WS. Needs to be dug out.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment.4/18/2012 Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slopes. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.40)] FS Date: 11/30/2016 7:50:53 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51035\_66877.jpg



View of WS flap gate and headwall.

LM Start	8.81	Rating **	M	Issue No.	49
LM End	8.81	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.478648 °	39.478648 °
				-121.736477 °	-121.736477 °
DWR ID	DWR_MA0013_01_f_2016_49				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_49\_20170315\_00009.jpg



View of the erosion site along the landside toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	8.82	Rating **	U	Issue No.	116
LM End	8.82	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.478573 °	39.478573 °
				-121.736550 °	-121.736550 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51036  
DS\_ID:16323  
EP\_NO: N/A  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 11/16/2016 LS erosion is still a major problem here. (DWR Sutter Yard- A Freitag)4/28/2016 Erosion still present at the LS headwall. (DWR Sutter Yard - a Freitag)7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. (DWR Sutter Yard - a Freitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - a Freitag)12/3/2013 Same as last inspection. (DWR Sutter Yard - a Freitag)7/15/2013 Same as last inspection. (DWR Sutter Yard - a Freitag)4/18/2012 Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder. (DWR UCIP - omagana)  
FIELD\_STRUCT\_DESC: [Richvale Irrigation Canal Siphon] 60-inch by 84-inch (5-foot by 7 foot) concrete irrigation conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on the waterside (WS). Concrete headwall on the landside (LS). 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.95)]  
FS Date: 11/30/2016 7:54:23 AM

LM Start	<b>8.82</b>	Rating **	U	Issue No.	<b>116 (cont)</b>
LM End	<b>8.82</b>	Issue Type +	En	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51036\_66881.jpg



Catwalk and screw gate located on WS.

Photo 2 of 3 : UCIP\_SP\_2017\_51036\_66884.jpg



Catwalk & gate located on WS. No daylight point on WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	8.82	Rating **	U	Issue No.	116 (cont)	
LM End	8.82	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			39.478573 °		39.478573 °
				-121.736550 °		-121.736550 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51036 DS_ID:16323 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/16/2016 LS erosion is still a major problem here. (DWR Sutter Yard- AFreitag)4/28/2016 Erosion still present at the LS headwall. (DWR Sutter Yard - afreitag)7/13/2015 Erosion still present behind the LS headwall. It looks to be getting worse and is starting to affect the levee slope. (DWR Sutter Yard - afreitag)5/21/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/18/2012 Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulder. (DWR UCIP - omagana) FIELD_STRUCT_DESC: [Richvale Irrigation Canal Siphon] 60-inch by 84-inch (5-foot by 7 foot) concrete irrigation conduit through the levee, 18.4 feet below the crown. Distribution box and walkway are located on the waterside (WS). Concrete headwall on the landside (LS). 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.95)] FS Date: 11/30/2016 7:54:23 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51036\_66882.jpg



View of LS structure. Erosion present behind headwall.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



## Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	<b>8.84</b>	Rating **	A/W	Issue No.	<b>117 (cont)</b>
LM End	<b>8.84</b>	Issue Type +	Ma	Location *	LS

Overview of levee crown at crossing looking D/S.

View of WS slope with 2 slide gates.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	8.84	Rating **	A/W	Issue No.	117 (cont)	
LM End	8.84	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.478281 °		39.478281 °
				-121.736780 °		-121.736780 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51039 DS_ID:16325 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/28/2016 Crossing appears to be in good condition. 7/13/2015 Crossing appears in good condition. No noticeable issues to report. 5/21/2014 Same as last inspection. 12/3/2013 Same as last inspection. 7/15/2013 LS slope has been sprayed and cleared of vegetation and is in good condition. 4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photo of cleared vegetation from slopes and WS headwall. Minor debris scattered on WS slope. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate on the WS end. Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 8.98)] FS Date: 11/30/2016 8:02:47 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51039\_66900.jpg



View of slide gate on WS. Debris blocking gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	8.89	Rating **	M	Issue No.	118
LM End	8.89	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.477588 °	39.477588 °
				-121.737040 °	-121.737040 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51041 DS_ID:16828 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 SOome erosion still present near the LS structure. Does not affect the levee yet. (DWR Sutter Yard-AFreitag)4/28/2016 Erosion happening around the concrete structure on LS. Its not yet affecting the levee but will keep monitoring.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Crossing is not visible on WS. FIELD_STRUCT_DESC: 72-inch irrigation pipe through the levee located 14.2 feet below the crown. Appurtances include concrete pipe siphon, screw gate, and distribution box visible on the landside (LS). No appurtenances found on the waterside (WS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 9.02)] FS Date: 11/30/2016 9:22:50 AM					

LM Start	<b>8.89</b>	Rating **	M	Issue No.	<b>118 (cont)</b>
LM End	<b>8.89</b>	Issue Type +	En	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51041\_66908.jpg



Overview picture looking south

Photo 2 of 3 : UCIP\_SP\_2017\_51041\_66907.jpg



Headwall at LS distribution box

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	8.89	Rating **	M	Issue No.	118 (cont)	
LM End	8.89	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.477588 °	39.477588 °	
				-121.737040 °	-121.737040 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51041 DS_ID:16828 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/16/2016 SOome erosion still present near the LS structure. Does not affect the levee yet. (DWR Sutter Yard-AFreitag)4/28/2016 Erosion happening around the concrete structure on LS. Its not yet affecting the levee but will keep monitoring.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Crossing is not visible on WS. FIELD_STRUCT_DESC: 72-inch irrigation pipe through the levee located 14.2 feet below the crown. Appurtances include concrete pipe siphon, screw gate, and distribution box visible on the landside (LS). No appurtenances found on the waterside (WS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 9.02)] FS Date: 11/30/2016 9:22:50 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51041\_76257.jpg



Enter photo 3 description or comment here.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	8.90	Rating **	M	Issue No.	119
LM End	8.90	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.477530 °	39.477530 °
				-121.737060 °	-121.737060 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51042					
DS_ID:16328					
EP_NO: 1234A					
Repair Type: Non-Urgent					
Crossing Status: Indicator Found					
UCIP Comments: 11/16/2016 WS marker is knocked over and laying on the ground. (DWR Sutter Yard- A Freitag)4/28/2016 Marker missing on WS.7/13/2015 Crossing appears in good condition. No noticeable issues to report.Need to contact owner to replace marker.7/15/2013 Same as last inspection.12/3/2013 Same as last inspection.5/21/2014 Same as last inspection.					
FIELD_STRUCT_DESC: Underground telephone cable through the levee at an unknown depth below the crown. (Permit No. 1234, 1234A, 1947 - Pacific Telephone and Telegraph Company [PT&T]) [Additional Reference(s): DWR Levee Log, 1993]					
FS Date: 11/30/2016 9:26:42 AM					

Photo 1 of 1 : UCIP\_SP\_2017\_51042\_66909.jpg



Underground telephone cable marker located on WS.

LM Start	8.92	Rating **	M	Issue No.	65
LM End	9.33	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.477245 °	39.471975 °
				-121.737253 °	-121.740795 °
DWR ID	DWR_MA0013_01_f_2016_65				
Comment Code					
FE : Fence					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	8.95	Rating **	A/W	Issue No.	120
LM End	8.95	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.476839 °	39.476839 °
				-121.737540 °	-121.737540 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51043 DS_ID:16317 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inpect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 9.09)] FS Date: 11/30/2016 9:28:48 AM					

LM Start	<b>8.95</b>	Rating **	A/W	Issue No.	<b>120 (cont)</b>
LM End	<b>8.95</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51043\_66910.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3 : UCIP\_SP\_2017\_51043\_66911.jpg



View of WS slope and toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	8.95	Rating **	A/W	Issue No.	120 (cont)
LM End	8.95	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.476839 °	39.476839 °
				-121.737540 °	-121.737540 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51043 DS_ID:16317 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 LS inlet has minor vegetation still. WS appears in good condition.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspections as Corp's Inspect ID# USACE_CESPK_M13D_2011_p_0278 for WS outlet sedimentation and sediment/grass at LS inlet. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 10.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. Flashboards should be present on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 9.09)] FS Date: 11/30/2016 9:28:48 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_51043\_66912.jpg



View of LS slope and toe.

LM Start	9.60	Rating **	A	Issue No.	88
LM End	9.60	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.468532 °	39.468532 °
				-121.743045 °	-121.743045 °
DWR ID	DWR_MA0013_01_s_2017_88				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
There are native grasses on both slopes.					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_88\_20170508\_00144.jpg



View of native grasses on both slopes.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	9.70	Rating **	M	Issue No.	5
LM End	9.72	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.467170 °	39.466860 °
				-121.743887 °	-121.744108 °
DWR ID	DWR_MA0013_01_s_2012_5				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_5\_20170315\_00003.jpg



View of the overgrown trees along the landside slope and toe.

LM Start	9.73	Rating **	M	Issue No.	10
LM End	9.75	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.466732 °	39.466478 °
				-121.744180 °	-121.744338 °
DWR ID	DWR_MA0013_01_f_2013_10				
Comment Code					
MA : Material					
Inspector Comment					
Move the trailer and materials outside the 10 foot easement.					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_10\_20170315\_00004.jpg



View of a trailer and material along the landside toe.

LM Start	9.75	Rating **	M	Issue No.	64
LM End	9.75	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.466478 °	39.466478 °
				-121.744338 °	-121.744338 °
DWR ID	DWR_MA0013_01_f_2016_64				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

* Location LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	9.90	Rating **	M	Issue No.	63
LM End	9.90	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.464527 °	39.464527 °
				-121.745568 °	-121.745568 °
DWR ID	DWR_MA0013_01_f_2016_63				
Comment Code					
FE : Fence					
Inspector Comment					

No Photos

LM Start	9.96	Rating **	M	Issue No.	17
LM End	10.21	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.463812 °	39.460569 °
				-121.746113 °	-121.748210 °
DWR ID	DWR_MA0013_01_f_2016_17				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Dense tulies on the landside toe.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	11.03	Rating **	A/W	Issue No.	121
LM End	11.03	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.449886 °	39.449886 °
				-121.755050 °	-121.755050 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51048 DS_ID:16332 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection. FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends and weir in channel. Crossing is used as an irrigation turnout. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 11.21)] FS Date: 11/30/2016 9:41:26 AM					

LM Start	<b>11.03</b>	Rating **	A/W	Issue No.	<b>121 (cont)</b>
LM End	<b>11.03</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51048\_66926.jpg



View of WS corrugated metal riser and concrete wall.

Photo 2 of 3 : UCIP\_SP\_2017\_51048\_66925.jpg



Corrugated metal riser with owner information.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	11.03	Rating **	A/W	Issue No.	121 (cont)	
LM End	11.03	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.449886 °	39.449886 °	
				-121.755050 °	-121.755050 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51048 DS_ID:16332 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/16/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection. FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends and weir in channel. Crossing is used as an irrigation turnout. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 11.21)] FS Date: 11/30/2016 9:41:26 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51048\_66928.jpg



Trash rack on WS headwall.

LM Start	11.58	Rating **	M	Issue No.	4
LM End	11.59	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			39.442821 °	39.442738 °
				-121.759851 °	-121.759908 °
DWR ID	DWR_MA0013_01_s_2016_4				
Comment Code					
Inspector Comment					
2011 - Small erosion pocket likely caused by irrigation diversion structure. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: CHK_11-7_R]					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	11.60	Rating **	A/W	Issue No.	122 (cont)
LM End	11.60	Issue Type +	Ma	Location *	WS

A gravel road leads towards a body of water under a clear blue sky. A white truck is parked on the road, and a person is standing near the water's edge. The road is flanked by dry grass and some trees on the left.

A hand-operated water pump is shown on a gravelly bank. It features a large wooden wheel connected to a metal frame. The pump is positioned next to a body of water, and the text "POMPA MANUALE" is visible on the side of the frame.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	11.60	Rating **	A/W	Issue No.	122 (cont)	
LM End	11.60	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.442639 °		39.442639 °
				-121.760070 °		-121.760070 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51049						
DS_ID:16333						
EP_NO: N/A						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments: 11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.						
FIELD_STRUCT_DESC: 60-inch corrugated metal drainage pipe through the levee, 11.3 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on both ends. Crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 145). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 11.78)]						
FS Date: 11/30/2016 9:47:06 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51049\_66930.jpg



Trash rack on WS headwall.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	12.19	Rating **	M	Issue No.	123
LM End	12.19	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.435169 °	39.435169 °
				-121.765290 °	-121.765290 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51050  
DS\_ID:16334  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Cannot locate the WS pipe end. (DWR Sutter Yard- A Freitag) 4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end. 7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection. 12/3/2013 Same as last inspection. 7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe. 4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylight after WS slope is cleared.  
FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)]  
FS Date: 11/30/2016 9:52:33 AM

LM Start	<b>12.19</b>	Rating **	M	Issue No.	<b>123 (cont)</b>
LM End	<b>12.19</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51050\_66940.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3 : UCIP\_SP\_2017\_51050\_66936.jpg



View of WS slope and channel.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	12.19	Rating **	M	Issue No.	123 (cont)
LM End	12.19	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.435169 °	39.435169 °
				-121.765290 °	-121.765290 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51050 DS_ID:16334 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Cannot locate the WS pipe end. (DWR Sutter Yard- A Freitag)4/28/2016 Crossing appears to be in good condition but could not locate the WS pipe end.7/13/2015 New screw gate installed inside the WS standpipe. 5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.38)] FS Date: 11/30/2016 9:52:33 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_51050\_66939.jpg



Slide gate located on WS slope.

LM Start	12.42	Rating **	M	Issue No.	62
LM End	12.70	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.432116 °	39.428581 °
				-121.767341 °	-121.769739 °
DWR ID	DWR_MA0013_01_f_2016_62				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	12.74	Rating **	M	Issue No.	124
LM End	12.74	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.428070 °	39.428070 °
				-121.770080 °	-121.770080 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51052  
DS\_ID:16336  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Slide gate still missing from inside the WS standpipe. (DWR Sutter Yard- A Freitag) 4/28/2016 Slide gate was removed from inside the WS standpipe. 7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch. 5/21/2014 Same as last inspection. 12/3/2013 Same as last inspection. 7/15/2013 Same as last inspection. 4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)]  
FS Date: 11/30/2016 9:55:46 AM

LM Start	<b>12.74</b>	Rating **	M	Issue No.	<b>124 (cont)</b>
LM End	<b>12.74</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51052\_66952.jpg



Overview picture looking south on right bank of Cherokee Canal.

Photo 2 of 3 : UCIP\_SP\_2017\_51052\_66959.jpg



View of WS slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	12.74	Rating **	M	Issue No.	124 (cont)	
LM End	12.74	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.428070 °		39.428070 °
				-121.770080 °		-121.770080 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51052 DS_ID:16336 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Slide gate still missing from inside the WS standpipe. (DWR Sutter Yard- A Freitag) 4/28/2016 Slide gate was removed from inside the WS standpipe. 7/13/2015 New screw gate installed on the WS pipe end in the irrigation ditch. 5/21/2014 Same as last inspection. 12/3/2013 Same as last inspection. 7/15/2013 Same as last inspection. 4/18/2012 Irrigation turnout. Not in use during April 2012 Inspection. During the follow up May 2012 Inspection structure was being used as irrigation turnout, reason for barcode tags. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 10.7 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. This crossing is used as an irrigation turnout bar code plate located on the WS slide gate (identified as 141 and 142). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 12.94)] FS Date: 11/30/2016 9:55:46 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51052\_66951.jpg



Slide gate located on WS slope. Owner information marked on gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	13.29	Rating **	M	Issue No.	125
LM End	13.29	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.421088 °	39.421088 °
				-121.775104 °	-121.775104 °
DWR ID					

Comment Code					

Inspector Comment					
FS_ID:51054 DS_ID:16461 EP_NO: 17030 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 11/17/2016 Markers missing near the levee. Oly marker present is located on the East side of the Unit2 levee. (DWR Sutter Yard- AFreitag)4/28/2016 Lines lines are suspected to be located on the upstream side of the roadway bridge and not the downstream side like the coordinates in this report show. Will need to take new coordinate readings. Markers are missing near levees.7/13/2015 Unable to locate.5/21/2014 Same as last inspection.12/3/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate any markers.4/18/2012 Attempt to locate this crossing during next inspection when tall grass is cleared from slopes-look for utility markers. FIELD_STRUCT_DESC: 8-inch high density polyethylene (HDPE) communication conduit, contains three 2-inch and three 1.5-inch fiber optic cables, backfilled with bentonite on the ends of the bore casing through the levee at an unknown depth below the crown. Conduit is bored across and under Cherokee Canal and its levees. Permit records indicates the conduit is at least 5 feet below the bottom of the low flow of the channel. Owner is listed in the permit as Pacific Fiber Link LLC but permit Inspection sheets list Worldwide Fiber. (Permit No. 17030, 2000 - Worldwide Fiber) FS Date: 11/30/2016 9:59:08 AM					

LM Start	<b>13.29</b>	Rating **	M	Issue No.	<b>125 (cont)</b>
LM End	<b>13.29</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP\_SP\_2017\_51054\_75014.jpg



Marker located along side of road about 200 yds east of levees

Photo 2 of 2 : UCIP\_SP\_2017\_51054\_75015.jpg



Crossing owner contact info

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	13.32	Rating **	M	Issue No.	87
LM End	13.32	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.420783 °	39.420783 °
				-121.775545 °	-121.775545 °
DWR ID	DWR_MA0013_01_s_2017_87				
Comment Code					
DE : Debris					
Inspector Comment					
Remove the debris from the waterside toe.					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_87\_20170508\_00143.jpg



View of the debris on the waterside toe.

LM Start	13.33	Rating **	A/W	Issue No.	126
LM End	13.33	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.420667 °	39.420667 °
				-121.775700 °	-121.775700 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51055 DS_ID:16337 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/17/2016 Ws pipe end was submerged but crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 New screwgate installed inside of WS standpipe.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.1 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.53)] FS Date: 11/30/2016 9:59:38 AM					

Photo 1 of 3 : UCIP\_SP\_2017\_51055\_66966.jpg



Overview of levee crown at crossing looking downstream.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	13.33	Rating **	A/W	Issue No.	126 (cont)
LM End	13.33	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.420667 °	39.420667 °
				-121.775700 °	-121.775700 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51055  
DS\_ID:16337  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Ws pipe end was submerged but crossing appears to be in good condition. (DWR Sutter Yard-AFreitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 New screwgate installed inside of WS standpipe.5/21/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.1 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.53)]  
FS Date: 11/30/2016 9:59:38 AM

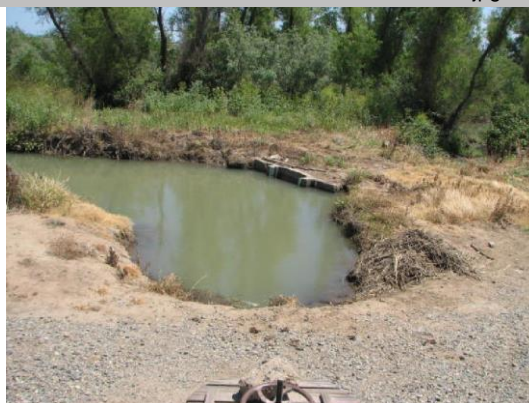
LM Start	<b>13.33</b>	Rating **	A/W	Issue No.	<b>126 (cont)</b>
LM End	<b>13.33</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : UCIP\_SP\_2017\_51055\_66963.jpg



View of WS slope.

Photo 3 of 3 : UCIP\_SP\_2017\_51055\_66967.jpg



View of WS slope and channel.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

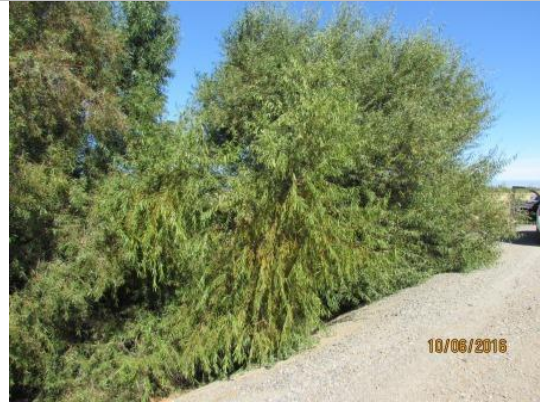
**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	13.76	Rating **	U	Issue No.	61
LM End	13.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.416854 °	39.416854 °
				-121.781855 °	-121.781855 °
DWR ID	DWR_MA0013_01_f _ 2016_61				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_61\_20170315\_00016.jpg



View of the overgrown trees and vegetation along the landside slope and toe.

LM Start	13.76	Rating **	M	Issue No.	127
LM End	13.76	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.416833 °	39.416833 °
				-121.781930 °	-121.781930 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51056 DS_ID:16338 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)] FS Date: 11/30/2016 10:02:08 AM					

Photo 1 of 3 : UCIP\_SP\_2017\_51056\_66970.jpg



WS headwall and flap gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	13.76	Rating **	M	Issue No.	127 (cont)	
LM End	13.76	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.416833 °	39.416833 °	
				-121.781930 °	-121.781930 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51056 DS_ID:16338 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Appears abandoned. WS flap gate completely silted over and LS screw gate is completely overgrown by a tree and is not accessible for inspection. (DWR Sutter Yard-AFreitag)5/3/2016 Crossing appears to be abandoned. WS flap gate was completely silted over and LS slide gate is very overgrown by a tree.7/13/2015 WS flap gate is blocked from opening by sediment and vegetation. Needs to be cleared away. LS opening is being over grown by a tree and needs to be cutback.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tree. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 12.7 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwall on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.96)] FS Date: 11/30/2016 10:02:08 AM						

LM Start	<b>13.76</b>	Rating **	M	Issue No.	<b>127 (cont)</b>
LM End	<b>13.76</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : UCIP\_SP\_2017\_51056\_66971.jpg



View of channel at crossing.

Photo 3 of 3 : UCIP\_SP\_2017\_51056\_66969.jpg



Tree fallen at LS headwall.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	13.77	Rating **	M	Issue No.	128
LM End	13.77	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.416756 °	39.416756 °
				-121.782060 °	-121.782060 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51057 DS_ID:16339 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Abandoned. (DWR Sutter Yard-AFreitag)5/03/2016 ABANDONED CROSSING7/13/2015 Abandoned crossing. Slide gate is buried on the WS.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 Non-functional crossing-buried slide gate on WS. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photo of cleared WS & LS slopes or toe.This crossing is listed in the USACE periodic inspection report as Corp's Inspection ID# USACE_CESPK_M13D_2011_p_0352 for abandoned gate on WS slope. FIELD_STRUCT_DESC: *ABANDONED* 12-inch steel drainage pipe through the levee, 3 feet below the crown. Gate valve on the waterside (WS) slope. 0.25-inch steel plate welded on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.97)] FS Date: 11/30/2016 10:04:30 AM					

Photo 1 of 2 : UCIP\_SP\_2017\_51057\_66972.jpg



Buried slide gate on the WS slope.

LM Start	13.77	Rating **	M	Issue No.	128 (cont)
LM End	13.77	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : UCIP\_SP\_2017\_51057\_66973.jpg



View of LS slope and toe. Unable to find welded plate on LS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	14.21	Rating **	M	Issue No.	60
LM End	14.21	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.412776 °	39.412776 °
				-121.788573 °	-121.788573 °
DWR ID	DWR_MA0013_01_f_2016_60				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	14.22	Rating **	M	Issue No.	59
LM End	14.22	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.412726 °	39.412726 °
				-121.788658 °	-121.788658 °
DWR ID	DWR_MA0013_01_f_2016_59				
Comment Code					
DE : Debris					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	14.58	Rating **	U	Issue No.	129
LM End	14.58	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.409481 °	39.409481 °
				-121.794010 °	-121.794010 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51058

DS\_ID:16368

EP\_NO: N/A

Repair Type: Urgent

Crossing Status: Found

UCIP Comments: 11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard - AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioration but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard - afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard - afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana)

FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)]

FS Date: 11/30/2016 10:10:50 AM

LM Start	<b>14.58</b>	Rating **	U	Issue No.	<b>129 (cont)</b>
LM End	<b>14.58</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51058\_66976.jpg



Headwall and flapgate located on water side of levee

Photo 2 of 3 : UCIP\_SP\_2017\_51058\_66974.jpg



Headwall and flapgate located on water side of levee

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	<b>14.58</b>	Rating **	U	Issue No.	<b>129 (cont)</b>
LM End	<b>14.58</b>	Issue Type +	Ma	Location *	LS
Category	Supplemental	GPS Latitude/Longitude			
		Start		End	
Item	DWR UCIP LMA Responsibility	39.409481 °		39.409481 °	
		-121.794010 °		-121.794010 °	
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51058 DS_ID:16368 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Top of pipe on WS still showing heavy signs of corrosion with visible holes between the flapgate flange and the concrete headwall. The pipe was mostly underwater so could not internally inspect it for more damage or corrosion. (DWR Sutter Yard - AFreitag)5/03/2016 Top of the pipe on the WS has holes in it between the flapgate flange and headwall. Crossing is showing signs of rust and deterioration but it was mostly underwater so could not inspect the inside of the pipe. (DWR Sutter Yard - afreitag)7/13/2015 Both sides of crossing were underwater at the time of inspection. (DWR Sutter Yard - afreitag)5/22/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/3/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged open. (DWR Sutter Yard - afreitag)4/18/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged open. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 14.79)] FS Date: 11/30/2016 10:10:50 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_51058\_66975.jpg



Head wall and screw gate located on land side of levee

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	14.91	Rating **	A/W	Issue No.	130
LM End	14.91	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.406570 °	39.406570 °
				-121.798770 °	-121.798770 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51059  
DS\_ID:16367  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 5/03/2016 Crossing appears to be in good condition. 7/13/2015 Crossing appears in good condition. No noticeable issues to report. 5/22/2014 Same as last inspection. 12/3/2013 Same as last inspection. 7/15/2013 Slopes have been cleared of vegetation and are in good condition. 4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS & LS slopes.  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.12)]  
FS Date: 11/30/2016 10:25:11 AM

LM Start	<b>14.91</b>	Rating **	A/W	Issue No.	<b>130 (cont)</b>
LM End	<b>14.91</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51059\_66981.jpg



WS headwall and flapgate

Photo 2 of 3 : UCIP\_SP\_2017\_51059\_66980.jpg



Slide gate located on LS toe. Dense vegetation present on LS slope.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	14.91	Rating **	A/W	Issue No.	130 (cont)	
LM End	14.91	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.406570 °	39.406570 °	
				-121.798770 °	-121.798770 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51059 DS_ID:16367 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 Crossing appears in good condition. No noticeable issues to report.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation. Need overall photo of crossing and photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 12.4 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.12)] FS Date: 11/30/2016 10:25:11 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51059\_66982.jpg



WS slope cleared of vegetation

LM Start	15.01	Rating **	M	Issue No.	58
LM End	15.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.405630 °	39.404872 °
				-121.800265 °	-121.801491 °
DWR ID	DWR_MA0013_01_f_2016_58				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_58\_20170315\_00015.jpg



View of the dense vegetation along the landside toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	15.58	Rating **	M	Issue No.	57
LM End	15.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.400380 °	39.400380 °
				-121.808432 °	-121.808432 °
DWR ID	DWR_MA0013_01_f_2016_57				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_57\_20170315\_00014.jpg



View of slope instability along the landside slope.

LM Start	15.71	Rating **	M	Issue No.	86
LM End	15.71	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.399168 °	39.399168 °
				-121.810317 °	-121.810317 °
DWR ID	DWR_MA0013_01_s_2017_86				
Comment Code					
DE : Debris					
Inspector Comment					
Remove the debris from the waterside toe.					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_86\_20170508\_00142.jpg



View of the debris along the waterside toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	15.72	Rating **	M	Issue No.	131
LM End	15.72	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.399051 °	39.399051 °
				-121.810550 °	-121.810550 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51060  
DS\_ID:16364  
EP\_NO: 7521  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard- A Freitag) 5/3/2016 Tree near the WS pipe end has been cut down. Stump is still in place. Water was too high to be able to see if the pipe inside was damaged. Minor erosion starting behind the WS headwall. 7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition. 5/22/2014 Same as last inspection. 12/3/2013 Same as last inspection. 7/15/2013 Slopes have been cleared of vegetation and are in good condition. 4/18/2012 Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes.  
FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. A 48-inch corrugated metal standpipe located approximately 12 feet from landside (LS) levee toe. (Permit No. 7521, 1972 - Askew Ranch) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.95)]  
FS Date: 11/30/2016 10:36:52 AM

LM Start	15.72	Rating **	M	Issue No.	131 (cont)
LM End	15.72	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51060\_66989.jpg



Overview of levee crown at crossing looking downstream.

Photo 2 of 3 : UCIP\_SP\_2017\_51060\_66987.jpg



View of WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	15.72	Rating **	M	Issue No.	131 (cont)	
LM End	15.72	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.399051 °		39.399051 °
				-121.810550 °		-121.810550 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51060 DS_ID:16364 EP_NO: 7521 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard- A Freitag)5/3/2016 Tree near the WS pipe end has been cut down. Stump is still in place. Water was too high to be able to see if the pipe inside was damaged. Minor erosion starting behind the WS headwall.7/13/2015 WS pipe end is heavily vegetated with trees and is making it almost impossible to inspect. Needs to be cleared out. LS appears in good condition.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Slopes have been cleared of vegetation and are in good condition.4/18/2012 Limited inspection on WS and LS slopes/toe due to dense vegetation. Erosion behind headwall on WS toe. Need photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. A 48-inch corrugated metal standpipe located approximately 12 feet from landside (LS) levee toe. (Permit No. 7521, 1972 - Askew Ranch) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.95)] FS Date: 11/30/2016 10:36:52 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51060\_66986.jpg



View of headwall within channel.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	15.77	Rating **	M	Issue No.	132
LM End	15.77	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.398615 °	39.398615 °
				-121.811250 °	-121.811250 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51061 DS_ID:16373 EP_NO: 11805B Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard- A Freitag)5/03/2016 Crossing was underwater on both sides of levee during this inspection. Looks as if the wodden walkway was the same and no repairs have been made.7/13/2015 LS inlet still underwater. WS screwgate appears in good condition. Wooden walkway to the screwgate needs repairs.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 LS inlet is not visible-underwater. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 48-inch reinforced concrete irrigation pipe with six concrete collars through the levee, 14.4 feet below the crown to center of conduit. Slide gate, head-wall and wood walkway on two concrete piers on the waterside (WS) of levee. Revetment on the WS slope. Irrigation ditch on the landside (LS). (Permit No. 11805, 11805B, 1979 - Elna Schohr, Inc.) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 11/30/2016 10:40:33 AM					

LM Start	15.77	Rating **	M	Issue No.	132 (cont)
LM End	15.77	Issue Type +	En	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51061\_66993.jpg



WS view of appurtenances (catwalk, slide gate, and headwall)

Photo 2 of 3 : UCIP\_SP\_2017\_51061\_66995.jpg



WS view of catwalk, slide/screw gate, and headwall

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	15.77	Rating **	M	Issue No.	132 (cont)	
LM End	15.77	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.398615 °	39.398615 °	
				-121.811250 °	-121.811250 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51061 DS_ID:16373 EP_NO: 11805B Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Both pipe ends underwater at time of inspection. (DWR Sutter Yard- A Freitag)5/03/2016 Crossing was underwater on both sides of levee during this inspection. Looks as if the wooden walkway was the same and no repairs have been made.7/13/2015 LS inlet still underwater. WS screwgate appears in good condition. Wooden walkway to the screwgate needs repairs.5/22/2014 Same as last inspection.12/3/2013 Same as last inspection.7/15/2013 Same as last inspection.4/18/2012 LS inlet is not visible-underwater. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 48-inch reinforced concrete irrigation pipe with six concrete collars through the levee, 14.4 feet below the crown to center of conduit. Slide gate, head-wall and wood walkway on two concrete piers on the waterside (WS) of levee. Revetment on the WS slope. Irrigation ditch on the landside (LS). (Permit No. 11805, 11805B, 1979 - Elna Schohr, Inc.) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 11/30/2016 10:40:33 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51061\_66996.jpg



LS view of shoulder and slope.

LM Start	16.22	Rating **	M	Issue No.	7
LM End	17.17	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.394523 °	39.385580 °
				-121.817630 °	-121.831282 °
DWR ID	DWR_MA0013_01_s_2012_7				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	16.52	Rating **	M	Issue No.	56
LM End	16.52	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.391675 °	39.391675 °
				-121.821932 °	-121.821932 °
DWR ID	DWR_MA0013_01_f_2016_56				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_56\_20170315\_00013.jpg



View of dense trees along the landside toe.

LM Start	16.88	Rating **	M	Issue No.	55
LM End	16.88	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.388326 °	39.388326 °
				-121.827137 °	-121.827137 °
DWR ID	DWR_MA0013_01_f_2016_55				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_55\_20170315\_00012.jpg



View of slope instability issue along the landside slope.

\* Location  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable  
M : Minimally Acceptable  
U : Unacceptable  
N : Not Inspected/Rated  
C : Corrected  
A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	17.18	Rating **	M	Issue No.	133
LM End	17.18	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.385540 °	39.385540 °
				-121.831280 °	-121.831280 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51063 DS_ID:16371 EP_NO: 3511 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 11/17/2016 Unable to locate. (DWR Sutter Yard-AFreitag)5/03/2016 Unable to locate.7/13/2015 Unable to locate.5/22/2014 Same as last inspection.12/3/2013 Unable to locate.7/15/2013 Same as last inspection. Unable to locate.4/18/2012 Unable to determine if cable is still in use, per permit records indicate communication cable was installed in 1961, 1968 USACE requested to abandon line, 1974 USACE communication is not abandoned. Cable crosses multiple levees. FIELD_STRUCT_DESC: U.S. Army communication cable through the levee, 3 feet below the crown. (Permit No. 3511, 1961 - US Army Engineer District) [Additional Reference(s): DWR Levee Log, 1993] FS Date: 11/30/2016 10:45:33 AM					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	17.23	Rating **	A/W	Issue No.	134
LM End	17.23	Issue Type +	Ma	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.385172 °	39.385172 °	
			-121.832060 °	-121.832060 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51066  
DS\_ID:16369  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 5/03/2016 Crossing appears to be in good condition. 7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out. 5/22/2014 Same as last inspection. 12/3/2013 Sediment was dug out from WS flapgate allowing it to open. 7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup. 4/18/2012 Limited inspection on WS and LS slope due to dense vegetation and steep slopes. Need photos of cleared WS & LS slopes.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS).  
[Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.47)]  
FS Date: 11/30/2016 10:48:14 AM

LM Start	17.23	Rating **	A/W	Issue No.	134 (cont)
LM End	17.23	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51066\_67017.jpg



View of WS slope and toe.

Photo 2 of 3 : UCIP\_SP\_2017\_51066\_67019.jpg



View of WS headwall and flap gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	17.23	Rating **	A/W	Issue No.	134 (cont)
LM End	17.23	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.385172 °	39.385172 °
				-121.832060 °	-121.832060 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51066 DS_ID:16369 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)5/03/2016 Crossing appears to be in good condition.7/13/2015 WS flap gate is blocked from opening by sediment. Needs to be dug out.5/22/2014 Same as last inspection.12/3/2013 Sediment was dug out from WS flapgate allowing it to open.7/15/2013 Slopes have been sprayed and cleared of vegetation and are in good condition. WS flapgate is blocked from opening by sediment buildup.4/18/2012 Limited inspection on WS and LS slope due to dense vegetation and steep slopes. Need photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.1 feet below the crown. Flap gate on the waterside (WS). Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.47)] FS Date: 11/30/2016 10:48:14 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_51066\_67018.jpg



View of LS headwall.

LM Start	17.46	Rating **	M	Issue No.	9
LM End	17.50	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.382943 °	39.382635 °
				-121.835447 °	-121.836012 °
DWR ID	DWR_MA0013_01_s_2012_9				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	05/03/2017 05/03/2017	Bob Duffey

LM Start	17.47	Rating **	M	Issue No.	15
LM End	17.94	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.382852 °	39.378481 °
				-121.835654 °	-121.842394 °
DWR ID	DWR_MA0013_01_s_2012_15				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

LM Start	18.53	Rating **	M	Issue No.	53
LM End	18.59	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.373165 °	39.372718 °
				-121.850902 °	-121.851840 °
DWR ID	DWR_MA0013_01_f_2016_53				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_300\_53\_20170315\_00011.jpg



View of the dense vegetation along the landside slope and toe.

LM Start	18.58	Rating **	M	Issue No.	54
LM End	18.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.372793 °	39.372793 °
				-121.851677 °	-121.851677 °
DWR ID	DWR_MA0013_01_f_2016_54				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

* Location LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Spring 2017 Levee Inspection Results**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway			Bank	Unit Miles
Unit No. 02 Cherokee Canal			Left	22.84
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	5/4/2017 - 5/4/2017			
DWR Inspector	Bob Duffey			
Accompanied By	Shawn Freitag Sutter Maintenance Yard			

**Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

*The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.*

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	0.05	Rating **	M	Issue No.	912
LM End	0.05	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.573816 °	39.573816 °
				-121.701290 °	-121.701290 °
DWR ID					

Comment Code
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Inspector Comment
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FS\_ID:51068  
DS\_ID:16397  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the way through to the WS. (DWR Sutter Yard - afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard - afreitag)4/19/2012 4-6 inch pipe is not part of original crossing--remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP - omagana)  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04).  
FS Date: 11/30/2016 12:34:10 PM

Photo 1 of 3 : UCIP\_SP\_2017\_51068\_45640.jpg



Overview looking south on left levee

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	0.05	Rating **	M	Issue No.	912 (cont)
LM End	0.05	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.573816 °	39.573816 °
				-121.701290 °	-121.701290 °

**Comment Code**

**Inspector Comment**

FS\_ID:51068  
DS\_ID:16397  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the way through to the WS. (DWR Sutter Yard - afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard - afreitag)4/19/2012 4-6 inch pipe is not part of original crossing--remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP - omagana)  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04).  
FS Date: 11/30/2016 12:34:10 PM

Photo 2 of 3 : UCIP\_SP\_2017\_51068\_45642.jpg



Headwall and flap gate on WS. Soil and pipes stockpiled next to headwall.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	0.05	Rating **	M	Issue No.	912 (cont)
LM End	0.05	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.573816 °	39.573816 °
				-121.701290 °	-121.701290 °
DWR ID					

Comment Code
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Inspector Comment
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FS\_ID:51068  
DS\_ID:16397  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. 4inch pipe still present on LS but it does not affect the function of the crossing. (DWR Sutter Yard- AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--sleeved pipe does not prevent flap gate from closing on WS. Still need to coordinate with owner to remove sleeved pipe through existing crossing per Title 23. (DWR UCIP - omagana)4/27/2016 Crossing appears to be in good condition. 4 inch pipe is still present in LS opening but does not go all the way through to the WS. (DWR Sutter Yard - afreitag)7/01/2015 Crossing appears in good condition. No noticeable issues to report. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 4in. Pipe was removed and flapgate is closed and ready for high water. (DWR Sutter Yard - afreitag)7/10/2013 Same as last inspection. Urgency rating carry over from last entry. (DWR Sutter Yard - afreitag)4/19/2012 4-6 inch pipe is not part of original crossing--remove pipe. WS-pipe stockpile on WS slope. LS-Overgrown branches limit inspection. This crossing was listed in the USACE Periodic Inspection report listed as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0009 for WS flap gate not functioning properly as irrigation pipe passes inside crossing. (DWR UCIP - omagana)  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 6 feet below the crown. Concrete "U" headwalls on both WS and landside (LS). Flap gate on the waterside (WS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.04).  
FS Date: 11/30/2016 12:34:10 PM

Photo 3 of 3 : UCIP\_SP\_2017\_51068\_45643.jpg



LS headwall blocked by overgrown branches.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	0.06	Rating **	M	Issue No.	50
LM End	0.06	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.573692 °	39.573692 °
				-121.701286 °	-121.701286 °
DWR ID	DWR_MA0013_02_f_2016_50				
Comment Code					
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

No Photos

LM Start	0.07	Rating **	M	Issue No.	1
LM End	0.17	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.573523 °	39.572455 °
				-121.701387 °	-121.702370 °
DWR ID	DWR_MA0013_02_s_2012_1				
Comment Code					
EQ : Equipment					
Inspector Comment					

No Photos

LM Start	0.21	Rating **	M	Issue No.	53
LM End	0.56	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.571821 °	39.566737 °
				-121.702372 °	-121.702316 °
DWR ID	DWR_MA0013_02_f_2016_53				
Comment Code					
AT : Agricultural tilling					
Inspector Comment					
Monitor the tilling to make sure farmer is not encroaching into the levee.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_53\_20170315\_00013.jpg



View of ag tilling at the landside levee toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>0.58</b>	Rating **	M	Issue No.	<b>913</b>
LM End	<b>0.58</b>	Issue Type +	Ma	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.566479 °	39.566479 °	
			-121.702430 °	-121.702430 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51069  
DS\_ID:16398  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard- A/Freitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.57)]  
FS Date: 11/30/2016 12:38:12 PM

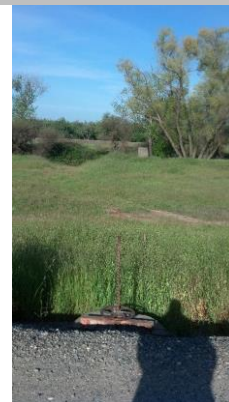
LM Start	<b>0.58</b>	Rating **	M	Issue No.	<b>913 (cont)</b>
LM End	<b>0.58</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51069\_67047.jpg



Overview looking south

Photo 2 of 3 : UCIP\_SP\_2017\_51069\_67048.jpg



View of WS slope and toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	0.58	Rating **	M	Issue No.	913 (cont)	
LM End	0.58	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.566479 °		39.566479 °
				-121.702430 °		-121.702430 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51069 DS_ID:16398 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Between the screwgate on the WS shoulder and the LS pipe end the pipe is about 50% full of soil. Crossing is still actively used by landowner for irrigation purposes. (DWR Sutter Yard- A/Freitag)4/27/2016 Pipe gets used by the landowner to irrigate his rice fields. It appeared to be in good condition.7/01/2015 LS pipe end is still about 50% full of sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken.4/19/2012 Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 0.57)] FS Date: 11/30/2016 12:38:12 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51069\_67045.jpg



Screw gate located on WS of levee. Screw gate covers needs to be repaired.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	1.60	Rating **	U	Issue No.	56
LM End	1.63	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.552195 °	39.551731 °
				-121.704786 °	-121.704721 °
DWR ID	DWR_MA0013_02_s_2016_56				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_56\_20170315\_00016.jpg



View of the agricultural ditch along the landside toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	1.70	Rating **	M	Issue No.	914
LM End	1.70	Issue Type +	Ma	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.551178 °	39.551178 °	
			-121.705660 °	-121.705660 °	
DWR ID					

Comment Code
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Inspector Comment
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FS\_ID:51071  
DS\_ID:16399  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- A Freitag) 4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition. 7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening. 5/29/2014 Same as last inspection. 12/9/2013 Same as last inspection. 7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening. 4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0108 for WS flap gate filled with soil and LS gate not functioning because of overgrown vegetation.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 - Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.70)]  
FS Date: 11/30/2016 12:41:27 PM

Photo 1 of 3 : UCIP\_SP\_2017\_51071\_67059.jpg



Overview of crossing

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	1.70	Rating **	M	Issue No.	914 (cont)
LM End	1.70	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.551178 °	39.551178 °
				-121.705660 °	-121.705660 °
DWR ID					

Comment Code
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Inspector Comment
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FS\_ID:51071  
DS\_ID:16399  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- A Freitag) 4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition. 7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening. 5/29/2014 Same as last inspection. 12/9/2013 Same as last inspection. 7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening. 4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0108 for WS flap gate filled with soil and LS gate not functioning because of overgrown vegetation.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issued for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 - Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.70)]  
FS Date: 11/30/2016 12:41:27 PM

Photo 2 of 3 : UCIP\_SP\_2017\_51071\_67058.jpg



View of flap gate on WS.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	1.70	Rating **	M	Issue No.	914 (cont)
LM End	1.70	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.551178 °	39.551178 °
				-121.705660 °	-121.705660 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51071 DS_ID:16399 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 LS screw gate still bent and in-operable. (DWR Sutter Yard- A Freitag)4/27/2016 LS screw gate is still bent. Rest of crossing appeared in good condition.7/01/2015 LS screw gate frame is still twisted and hindering the gate from opening.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening.4/19/2012 Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13G_2011_p_0108 for WS flap gate filled with soil and LS gate not functioning because of overgrown vegetation. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 7.9 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate at the LS toe in headwall. In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed. (Permit No. 3953, 1960 - Dr. John O. Gibbs, DBA Empire Land Company) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 1.70)] FS Date: 11/30/2016 12:41:27 PM					

Photo 3 of 3 : UCIP\_SP\_2017\_51071\_67057.jpg



View of WS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	1.73	Rating **	M	Issue No.	83
LM End	1.77	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.550765 °	39.550208 °
				-121.705963 °	-121.706052 °
DWR ID	DWR_MA0013_02_s_2017_83				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Repair the erosion along the waterside slope.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_83\_20170508\_00139.jpg



View of erosion along the waterside toe.

LM Start	2.53	Rating **	A/W	Issue No.	915
LM End	2.53	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.539195 °	39.539195 °
				-121.706070 °	-121.706070 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51072 DS_ID:16400 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Sediment dug out from in front of flap gate. Gate can now function properly. (DWR Sutter Yard-AFreitag)4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on slide gate. FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)] FS Date: 11/30/2016 12:42:19 PM					

Photo 1 of 3 : UCIP\_SP\_2017\_51072\_67063.jpg



Overview of levee crown looking south

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.	915 (cont)
LM End	2.53	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.539195 °	39.539195 °
				-121.706070 °	-121.706070 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51072 DS_ID:16400 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Sediment dug out from in front of flap gate. Gate can now function properly. (DWR Sutter Yard-AFreitag)4/27/2016 WS flapgate still blocked from opening by sediment buildup.7/01/2015 New screwgate installed on the LS. WS flapgate is still blocked from opening by sediment.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing.4/19/2012 Handle missing on slide gate. FIELD_STRUCT_DESC: 1 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)] FS Date: 11/30/2016 12:42:19 PM					

LM Start	<b>2.53</b>	Rating **	A/W	Issue No.	<b>915 (cont)</b>
LM End	<b>2.53</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : UCIP\_SP\_2017\_51072\_67068.jpg



View of WS slope.

Photo 3 of 3 : UCIP\_SP\_2017\_51072\_67064.jpg



Headwall and flap gates (2) located on WS

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.	916
LM End	2.53	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.539179 °	39.539179 °
				-121.706060 °	-121.706060 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51073 DS_ID:17169 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 New screwgate installed on the LS. WS appears to be in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Same as last inspection. FIELD_STRUCT_DESC: 2 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)] FS Date: 11/30/2016 12:45:01 PM					

Photo 1 of 3 : UCIP\_SP\_2017\_51073\_67075.jpg



Overview at levee crown looking south

LM Start	<b>2.53</b>	Rating **	A/W	Issue No.	<b>916 (cont)</b>
LM End	<b>2.53</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : UCIP\_SP\_2017\_51073\_67074.jpg



View of WS slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	2.53	Rating **	A/W	Issue No.	916 (cont)
LM End	2.53	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.539179 °	39.539179 °
				-121.706060 °	-121.706060 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51073 DS_ID:17169 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 New screwgate installed on the LS. WS appears to be in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 Same as last inspection. FIELD_STRUCT_DESC: 2 of 2: 36-inch corrugated metal drainage pipe through the levee, 9.7 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.54)] FS Date: 11/30/2016 12:45:01 PM					

Photo 3 of 3 : UCIP\_SP\_2017\_51073\_67071.jpg



Headwall and flap gates (2) located on the WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	2.62	Rating **	M	Issue No.	917
LM End	2.62	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.537864 °	39.537864 °
				-121.706190 °	-121.706190 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51074  
DS\_ID:16402  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0148 for LS gate obstructed by vegetation and WS flap gate is not functioning (propped open). FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)]  
FS Date: 11/30/2016 12:47:26 PM

LM Start	<b>2.62</b>	Rating **	M	Issue No.	<b>917 (cont)</b>
LM End	<b>2.62</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51074\_67077.jpg



Overview looking south from left levee

Photo 2 of 3 : UCIP\_SP\_2017\_51074\_67076.jpg



Headwall and flap gate located on WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	2.62	Rating **	M	Issue No.	917 (cont)
LM End	2.62	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.537864 °	39.537864 °
				-121.706190 °	-121.706190 °
DWR ID					

Comment Code
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Inspector Comment
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FS\_ID:51074  
DS\_ID:16402  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Sediment still blocking screw gate from fully closing. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is full of sediment and needs to be dug out so gate can close fully.7/01/2015 LS screwgate is still silted in and unable to be screwed down all the way. Needs to be cleaned out.5/29/2014 Same as last inspection.12/9/2013 WS flapgate was closed but LS slidegate is heavily vegetated and blocked from closing by sediment.7/10/2013 Same as last inspection.4/19/2012 Minor sediment built up on LS, remove sediment. Need photo of LS slide gate without sediment build up. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0148 for LS gate obstructed by vegetation and WS flap gate is not functioning (propped open). FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. Structure used to drain water from Nelson Shippe Road. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.63)]  
FS Date: 11/30/2016 12:47:26 PM

Photo 3 of 3 : UCIP\_SP\_2017\_51074\_67078.jpg



Headwall and screw gate located on LS.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	2.63	Rating **	M	Issue No.	918
LM End	2.63	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.537671 °	39.537671 °
				-121.706210 °	-121.706210 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51076 DS_ID:16403 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition.4/19/2012 Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.65)] FS Date: 11/30/2016 1:02:00 PM					

LM Start	<b>2.63</b>	Rating **	M	Issue No.	<b>918 (cont)</b>
LM End	<b>2.63</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51076\_67087.jpg



Overview at levee crown looking south

Photo 2 of 3 : UCIP\_SP\_2017\_51076\_67084.jpg



Headwall and flap gate located on WS

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	2.63	Rating **	M	Issue No.	918 (cont)	
LM End	2.63	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.537671 °		39.537671 °
				-121.706210 °		-121.706210 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51076 DS_ID:16403 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.7/01/2015 WS flap gate is partially blocked by sediment and needs to be cleaned.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS and WS slopes have been cleared of vegetation and are in good condition.4/19/2012 Burrowing holes located above WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.7 feet below the crown. Concrete "U" headwalls located on the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.65)] FS Date: 11/30/2016 1:02:00 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51076\_67086.jpg



Headwall and screw gate located on the LS

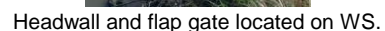
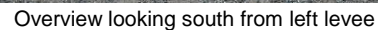
<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>2.65</b>	Rating **	M	Issue No.	<b>919 (cont)</b>
LM End	<b>2.65</b>	Issue Type +	Ma	Location *	WS

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	2.65	Rating **	M	Issue No.	919 (cont)	
LM End	2.65	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.537466 °		39.537466 °
				-121.706240 °		-121.706240 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51078 DS_ID:16415 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 LS screw gate closed but partially buried. WS flapgate was half submerged for inspection. (DWR Sutter Yard- A Freitag)4/27/2016 Both gates were underwater for inspection.7/01/2015 WS flap gate is partially held open by sediment and needs to be dug out to allow it to fully close.5/29/2014 Same as last inspection.12/9/2013 Both gates were out of water and in good condition.7/10/2013 LS and WS slopes are in good condition. Both LS and WS gates were fully submerged in water and unable to be inspected. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Concrete "U" headwall on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 2.66)] FS Date: 11/30/2016 1:04:40 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51078\_67092.jpg



WS headwall and flap gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable  N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	3.59	Rating **	M	Issue No.	920
LM End	3.59	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.523829 °	39.523829 °
				-121.706290 °	-121.706290 °
DWR ID					

**Comment Code**

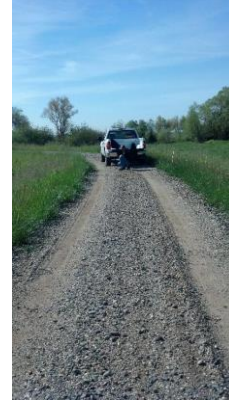
**Inspector Comment**

FS\_ID:51079  
DS\_ID:16405  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- A Freitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation- need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0172 for no access to WS gate due to high water & dense vegetation.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]  
FS Date: 11/30/2016 1:05:02 PM

Photo 1 of 3 : UCIP\_SP\_2017\_51079\_67094.jpg



Overview looking south from left levee

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	3.59	Rating **	M	Issue No.	920 (cont)
LM End	3.59	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.523829 °	39.523829 °
				-121.706290 °	-121.706290 °
DWR ID					

Comment Code
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Inspector Comment
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FS\_ID:51079  
DS\_ID:16405  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried. 7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris. 5/29/2014 Same as last inspection. 12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.

7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected. 4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation- need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0172 for no access to WS gate due to high water & dense vegetation.

FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)]

FS Date: 11/30/2016 1:05:02 PM

Photo 2 of 3 : UCIP\_SP\_2017\_51079\_67095.jpg



Flap gate submerged in water on WS of levee

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	3.59	Rating **	M	Issue No.	920 (cont)
LM End	3.59	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.523829 °	39.523829 °
				-121.706290 °	-121.706290 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51079 DS_ID:16405 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 appears abandoned. Both gates completely buried. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears abandoned. LS screw gate still buried and WS flap gate was 95% buried.7/01/2015 Still a non functioning crossing. LS screw gate is completely buried by sediment with only part of its frame and stem visible. WS flapgate is blocked from opening by sediment and debris.5/29/2014 Same as last inspection.12/9/2013 LS slide gate is completely buried by soil and WS flap gate is blocked from opening by sediment. Crossing appears abandoned and non-function.  7/10/2013 LS and WS slopes have been cleared by vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected.4/19/2012 Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation- need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13G_2011_p_0172 for no access to WS gate due to high water & dense vegetation. FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Concrete "U" headwalls located on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.61)] FS Date: 11/30/2016 1:05:02 PM					

Photo 3 of 3 : UCIP\_SP\_2017\_51079\_67096.jpg



View of flap gate submerged on WS toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	3.65	Rating **	A/W	Issue No.	921
LM End	3.65	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.523556 °	39.523556 °
				-121.705340 °	-121.705340 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51080  
DS\_ID:16848  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears to be in good condition. New slide gate installed on LS. 7/01/2015 Both gates were still submerged in water. Levee slopes were in good condition. 5/29/2014 Same as last inspection. 12/9/2013 Same as last inspection. 7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected. 4/19/2012 Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection.  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.67)]  
FS Date: 11/30/2016 1:06:54 PM

LM Start	<b>3.65</b>	Rating **	A/W	Issue No.	<b>921 (cont)</b>
LM End	<b>3.65</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51080\_67102.jpg



Overview looking south on left levee

Photo 2 of 3 : UCIP\_SP\_2017\_51080\_67103.jpg



Headwall and flap gate located on WS.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	3.65	Rating **	A/W	Issue No.	921 (cont)	
LM End	3.65	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.523556 °	39.523556 °	
				-121.705340 °	-121.705340 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51080 DS_ID:16848 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition. New slide gate installed on LS.7/01/2015 Both gates were still submerged in water. Levee slopes were in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected.4/19/2012 Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Concrete "U" headwalls on both the waterside (WS) and landside (LS) ends. Flap gate on the WS end. Slide gate on the LS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.67)] FS Date: 11/30/2016 1:06:54 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51080\_67101.jpg



Headwall and screw gate located on LS.

LM Start	3.73	Rating **	U	Issue No.	86
LM End	3.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.523902 °	39.523992 °
				-121.703928 °	-121.703418 °
DWR ID	DWR_MA0013_02_s_2017_86				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Repair the erosion along the landside slope caused by flood waters over topping the levee.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_86\_20170508\_00140.jpg



View of the erosion along the landside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>3.83</b>	Rating **	M	Issue No.	<b>922</b>
LM End	<b>3.83</b>	Issue Type +	Ma	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.524350 °	39.524350 °	
			-121.702180 °	-121.702180 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51081  
DS\_ID:16847  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- A Freitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13J\_2011\_p\_0010 for WS gate wedged open & missing LS slide gate.  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)]  
FS Date: 11/30/2016 1:07:36 PM

LM Start	<b>3.83</b>	Rating **	M	Issue No.	<b>922 (cont)</b>
LM End	<b>3.83</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51081\_67107.jpg



Overview looking south on left levee

Photo 2 of 3 : UCIP\_SP\_2017\_51081\_67108.jpg



Headwall and flap gate located on WS toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	3.83	Rating **	M	Issue No.	922 (cont)	
LM End	3.83	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.524350 °	39.524350 °	
				-121.702180 °	-121.702180 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51081 DS_ID:16847 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. It appears that this crossing does not require a slide gate. (DWR Sutter Yard- A Freitag)4/27/2016 LS slide gate was still missing. Rest of crossing appears to be in good condition.7/01/2015 There appears to be a LS gate now but both pipe ends were submerged so it was hard to tell for certain.5/29/2014 Same as last inspection.12/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing.7/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks.4/19/2012 LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE_CESPK_M13J_2011_p_0010 for WS gate wedged open & missing LS slide gate. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 8.8 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 3.85)] FS Date: 11/30/2016 1:07:36 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51081\_67110.jpg



View of channel at crossing looking D/S.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	3.85	Rating **	M	Issue No.	84
LM End	3.85	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.524503 °	39.524503 °
				-121.701777 °	-121.701777 °
DWR ID	DWR_MA0013_02_s_2017_84				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Repair the erosion along the landside slope caused by flood waters over topping levee.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_84\_20170508\_00141.jpg



View of the erosion along the landside slope.

LM Start	3.93	Rating **	M	Issue No.	85
LM End	3.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.525242 °	39.525242 °
				-121.700710 °	-121.700710 °
DWR ID	DWR_MA0013_02_s_2017_85				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Repair the erosion along the landside slope caused by flood waters over topping levee.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_85\_20170508\_00142.jpg



View of erosion along the landside slope.

LM Start	3.96	Rating **	M	Issue No.	87
LM End	4.04	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.525660 °	39.526603 °
				-121.700322 °	-121.699742 °
DWR ID	DWR_MA0013_02_s_2017_87				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Repair the erosion along the landside slope caused by flood waters over topping levee.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_87\_20170508\_00143.jpg



View of the erosion on the landside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	4.04	Rating **	M	Issue No.	911
LM End	4.78	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.526653 °	39.534091 °
				-121.699675 °	-121.690404 °
DWR ID	DWR_MA0013_02_s_2012_911				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_911\_20170315\_00027.jpg



View of agricultural ditch along the toe.

LM Start	4.17	Rating **	M	Issue No.	923
LM End	4.17	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.528210 °	39.528210 °
				-121.698410 °	-121.698410 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51082 DS_ID:16846 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Both pipe ends underwater for this inspection. (DWR Sutter Yard- A Freitag)4/27/2016 Both pipe ends were underwater for inspection.7/01/2015 Both pipe ends and gates were fully submerged.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. Both gates were fully submerged under water and unable to be inspected.4/19/2012 Rodent activity caused partial collapse on LS of levee in the vicinity of pipe. Limited inspection on WS slope due to dense vegetation. Limited inspection on gates due to both gates submerged under water. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. Concrete sump area with flash boards to drain farmers field is located on farmer's property near drain inlet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.20)] FS Date: 11/30/2016 1:12:08 PM					

Photo 1 of 3 : UCIP\_SP\_2017\_51082\_67115.jpg



Overview looking east on right bank of Cottonwood

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	4.17	Rating **	M	Issue No.	923 (cont)
LM End	4.17	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.528210 °	39.528210 °
				-121.698410 °	-121.698410 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51082  
DS\_ID:16846  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Both pipe ends underwater for this inspection. (DWR Sutter Yard- AFreitag)4/27/2016 Both pipe ends were underwater for inspection.7/01/2015 Both pipe ends and gates were fully submerged.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/10/2013 WS slope is cleared of vegetation and is in good condition. Both gates were fully submerged under water and unable to be inspected.4/19/2012 Rodent activity caused partial collapse on LS of levee in the vicinity of pipe. Limited inspection on WS slope due to dense vegetation. Limited inspection on gates due to both gates submerged under water.  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.3 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. Concrete sump area with flash boards to drain farmers field is located on farmer's property near drain inlet. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.20)]  
FS Date: 11/30/2016 1:12:08 PM

LM Start	<b>4.17</b>	Rating **	M	Issue No.	<b>923 (cont)</b>
LM End	<b>4.17</b>	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : UCIP\_SP\_2017\_51082\_67116.jpg



Unable to determine condition of flap gate on WS due to high water.

Photo 3 of 3 : UCIP\_SP\_2017\_51082\_67113.jpg



Overview of LS screw gate and concrete sump structure.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	4.65	Rating **	A/W	Issue No.	924
LM End	4.65	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.532510 °	39.532510 °
				-121.691340 °	-121.691340 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51083 DS_ID:16845 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears to be in good condition. 7/01/2015 Crossing appears to be in good condition. No noticeable issues to report. 5/29/2014 Same as last inspection. 12/9/2013 Same as last inspection. 7/10/2013 WS slope has been cleared of vegetation and is in good condition. 4/19/2012 Limited inspection due to dense vegetation on WS slope. Need photos of clear WS slope. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.6 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.69)] FS Date: 11/30/2016 1:25:15 PM					

LM Start	<b>4.65</b>	Rating **	A/W	Issue No.	<b>924 (cont)</b>
LM End	<b>4.65</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51083\_67119.jpg



Overview looking east on right levee of Gold Run Creek (referred to Unit 2 of Cherokee Canal).

Photo 2 of 3 : UCIP\_SP\_2017\_51083\_67122.jpg



Headwall and flap gate located on WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	4.65	Rating **	A/W	Issue No.	924 (cont)	
LM End	4.65	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.532510 °	39.532510 °	
				-121.691340 °	-121.691340 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51083 DS_ID:16845 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears to be in good condition. 7/01/2015 Crossing appears to be in good condition. No noticeable issues to report. 5/29/2014 Same as last inspection. 12/9/2013 Same as last inspection. 7/10/2013 WS slope has been cleared of vegetation and is in good condition. 4/19/2012 Limited inspection due to dense vegetation on WS slope. Need photos of clear WS slope. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.6 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 4.69)] FS Date: 11/30/2016 1:25:15 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51083\_67123.jpg



View of channel at crossing.

LM Start	4.80	Rating **	M	Issue No.	47
LM End	5.01	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.526924 °	39.526272 °
				-121.684802 °	-121.688169 °
DWR ID	DWR_MA0013_02_f_2016_47				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_47\_20170315\_00010.jpg



View of dense vegetation at the landside levee toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>5.01</b>	Rating **	A/W	Issue No.	<b>925</b>
LM End	<b>5.01</b>	Issue Type +	Ma	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.526298 °	39.526298 °	
			-121.688320 °	-121.688320 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51084  
DS\_ID:16395  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. Pipe is a 30" cmp. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Erosion on LS does not appear to be getting any worse with the rip-rap there. WS pipe end and gate appeared in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/19/2012 Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow.  
FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.06)]  
FS Date: 11/30/2016 1:25:53 PM

LM Start	<b>5.01</b>	Rating **	A/W	Issue No.	<b>925 (cont)</b>
LM End	<b>5.01</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51084\_67131.jpg



Overview looking west on the left levee of Cottonwood

Photo 2 of 3 : UCIP\_SP\_2017\_51084\_67129.jpg



Headwall and flap gate located on WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	5.01	Rating **	A/W	Issue No.	925 (cont)	
LM End	5.01	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.526298 °	39.526298 °	
				-121.688320 °	-121.688320 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51084 DS_ID:16395 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. Pipe is a 30" cmp. (DWR Sutter Yard- A/Freitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Erosion on LS does not appear to be getting any worse with the rip-rap there. WS pipe end and gate appeared in good condition.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/19/2012 Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 8.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.06)] FS Date: 11/30/2016 1:25:53 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51084\_67126.jpg



View of channel at crossing.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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## Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

FS\_ID:51087  
DS\_ID:16408  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. No apparent issues to report.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 WS and LS slopes have been cleared of vegetation and are in good condition. Slide gate on LS has been replaced.4/24/2012 Slide gate is damaged, needs to be replaced. Limited inspection on WS slope and toe due to dense vegetation. Need photos of clear WS slope and toe. This crossing was listed in the USACE Periodic Inspection report as Corp's inspection ID# USACE\_CESPK\_M13H\_2011\_p\_0026 for broken gate on LS.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.7 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both WS and LS ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.13)]  
FS Date: 11/30/2016 1:28:40 PM

Headwall and flap gate located on WS.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	5.09	Rating **	A/W	Issue No.	926 (cont)
LM End	5.09	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.526917 °	39.526917 °
				-121.689340 °	-121.689340 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51087 DS_ID:16408 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing appears to be in good condition. No apparent issues to report. 5/29/2014 Same as last inspection. 12/9/2013 Same as last inspection. 7/09/2013 WS and LS slopes have been cleared of vegetation and are in good condition. Slide gate on LS has been replaced. 4/24/2012 Slide gate is damaged, needs to be replaced. Limited inspection on WS slope and toe due to dense vegetation. Need photos of clear WS slope and toe. This crossing was listed in the USACE Periodic Inspection report as Corp's inspection ID# USACE_CESPK_M13H_2011_p_0026 for broken gate on LS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 5.7 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both WS and LS ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.13)] FS Date: 11/30/2016 1:28:40 PM					

Photo 3 of 3 : UCIP\_SP\_2017\_51087\_67141.jpg



Overview of LS floor is higher in elevation than pipe invert causing build up sediment.

LM Start	5.16	Rating **	M	Issue No.	48
LM End	5.16	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.526932 °	39.526932 °
				-121.690685 °	-121.690685 °
DWR ID	DWR_MA0013_02_s_2017_48				
Comment Code					
PR : Prunings					
Inspector Comment					
Remove the prunings from the landside slope.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_48\_20170508\_00144.jpg



View of the prunings along the landside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>5.29</b>	Rating **	M	Issue No.	<b>927</b>
LM End	<b>5.29</b>	Issue Type +	Ma	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.525958 °	39.525958 °	
			-121.692730 °	-121.692730 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51088  
DS\_ID:16409  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 There is a flapgate on the WS and a slide gate on the LS. The LS slide gate appears to be partially buried and blocked by vegetation. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13H\_2011\_p\_0035 non-functional crossing due to overgrown vegetation on WS flap gate. FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.34)]  
FS Date: 11/30/2016 1:30:53 PM

LM Start	<b>5.29</b>	Rating **	M	Issue No.	<b>927 (cont)</b>
LM End	<b>5.29</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51088\_67146.jpg



Overview of crossing looking downstream.

Photo 2 of 3 : UCIP\_SP\_2017\_51088\_67149.jpg



View of WS headwall with dense vegetation in channel.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	5.29	Rating **	M	Issue No.	927 (cont)	
LM End	5.29	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.525958 °	39.525958 °	
				-121.692730 °	-121.692730 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51088						
DS_ID:16409						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: 11/18/2016 There is a flapgate on the WS and a slide gate on the LS. The LS slide gate appears to be partially buried and blocked by vegetation. (DWR Sutter Yard- AFreitag)4/27/2016 LS slide gate is blocked by vegetation. Pipe appears to not be used.6/30/2015 WS flap gate was still overgrown with vegetation. Needs to be cleared away.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0035 non-functional crossing due to overgrown vegetation on WS flap gate. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 5.8 feet below the crown. Flap gate on the waterside (WS). Slide gate on the landside (LS). Concrete "U" headwalls located on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.34)]						
FS Date: 11/30/2016 1:30:53 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51088\_67148.jpg



Headwall and flap gate located on WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>5.36</b>	Rating **	M	Issue No.	<b>928</b>
LM End	<b>5.36</b>	Issue Type +	En	Location *	WS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		39.525361 °	39.525361 °	
			-121.693630 °	-121.693630 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51089  
DS\_ID:16410  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Abandoned pipe. It is still present on both sides of the levee and capped on the WS. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe appears abandoned. Should be removed.6/30/2015 Pipe still present with the cap on the waterside.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of clear slopes during next inspection. Metal plate bolted on pipe for closure on WS, open on LS.  
FIELD\_STRUCT\_DESC: \*ABANDONED\* 6-inch steel pipe through the levee, 1.6 feet below the crown. Plate bolted on the waterside (WS) end. Open on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.41)]  
FS Date: 11/30/2016 1:33:28 PM

LM Start	<b>5.36</b>	Rating **	M	Issue No.	<b>928 (cont)</b>
LM End	<b>5.36</b>	Issue Type +	En	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51089\_67152.jpg



Overview of site

Photo 2 of 3 : UCIP\_SP\_2017\_51089\_67150.jpg



Capped irrigation pipe located on water side of levee

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	5.36	Rating **	M	Issue No.	928 (cont)	
LM End	5.36	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.525361 °	39.525361 °	
				-121.693630 °	-121.693630 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51089 DS_ID:16410 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 Abandoned pipe. It is still present on both sides of the levee and capped on the WS. (DWR Sutter Yard-AFreitag)4/27/2016 Pipe appears abandoned. Should be removed.6/30/2015 Pipe still present with the cap on the waterside.5/29/2014 Same as last inspection.12/9/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slope due to dense vegetation. Need photos of clear slopes during next inspection. Metal plate bolted on pipe for closure on WS, open on LS. FIELD_STRUCT_DESC: *ABANDONED* 6-inch steel pipe through the levee, 1.6 feet below the crown. Plate bolted on the waterside (WS) end. Open on the landside (LS) end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.41)] FS Date: 11/30/2016 1:33:28 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51089\_67153.jpg



View of LS toe.

LM Start	5.45	Rating **	M	Issue No.	88
LM End	5.47	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.524738 °	39.524588 °
				-121.695135 °	-121.695455 °
DWR ID	DWR_MA0013_02_s_2017_88				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Repair the erosion along the landside slope caused by flood water over topping the levee.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_88\_20170508\_00145.jpg



View of erosion along the landside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	5.63	Rating **	M	Issue No.	89
LM End	5.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.524357 °	39.524327 °
				-121.698360 °	-121.698687 °
DWR ID	DWR_MA0013_02_s_2017_89				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Repair the erosion along the landside slope caused by flood waters over topping levee.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_89\_20170508\_00146.jpg



View of erosion along the landside slope.

LM Start	5.69	Rating **	M	Issue No.	90
LM End	5.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.524033 °	39.523517 °
				-121.699442 °	-121.700517 °
DWR ID	DWR_MA0013_02_s_2017_90				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Repair the erosion along the landside slope caused by flood waters over topping levee.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_90\_20170508\_00147.jpg



View of the erosion along the landside slope.

LM Start	5.71	Rating **	M	Issue No.	49
LM End	5.71	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.523803 °	39.523803 °
				-121.699804 °	-121.699804 °
DWR ID	DWR_MA0013_02_f_2016_49				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
1' by 2' by 4' hole in the levee toe that appears to be a temporary pump intake.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_49\_20170315\_00011.jpg



View of the man made hole at the waterside levee toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	5.80	Rating **	M	Issue No.	929
LM End	5.80	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.523381 °	39.523381 °
				-121.701270 °	-121.701270 °

Comment Code
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Inspector Comment
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FS\_ID:51090  
DS\_ID:16411  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/18/2016 LS slide gate still missing. Both pipe ends were submerged during inspection. (DWR Sutter Yard - afreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--flap gate on WS is present only LS gate missing. (DWR UCIP - omagana)4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing. (DWR Sutter Yard - afreitag)6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/09/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 Slide gate missing on LS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13H\_2011\_p\_0017 for missing slide gate. (DWR Sutter Yard - omagana)  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls located on both WS and LS toes. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.85)]  
FS Date: 11/30/2016 1:36:49 PM

Photo 1 of 3 : UCIP\_SP\_2017\_51090\_67155.jpg



Overview looking south

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable  N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	5.80	Rating **	M	Issue No.	929 (cont)
LM End	5.80	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.523381 °	39.523381 °
				-121.701270 °	-121.701270 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51090 DS_ID:16411 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 LS slide gate still missing. Both pipe ends were submerged during inspection. (DWR Sutter Yard - AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--flap gate on WS is present only LS gate missing. (DWR UCIP - omagana)4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing. (DWR Sutter Yard - afreitag)6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/09/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 Slide gate missing on LS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0017 for missing slide gate. (DWR Sutter Yard - omagana) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls located on both WS and LS toes. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.85)] FS Date: 11/30/2016 1:36:49 PM					

Photo 2 of 3 : UCIP\_SP\_2017\_51090\_67157.jpg



Headwall and flap gate on WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	5.80	Rating **	M	Issue No.	929 (cont)
LM End	5.80	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.523381 °	39.523381 °
				-121.701270 °	-121.701270 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51090 DS_ID:16411 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/18/2016 LS slide gate still missing. Both pipe ends were submerged during inspection. (DWR Sutter Yard - AFreitag)9/27/2016 Crossing has been downgraded from Urgent to Non-Urgent--flap gate on WS is present only LS gate missing. (DWR UCIP - omagana)4/27/2016 Both sides of pipe were underwater. Appears that LS gate is still missing. (DWR Sutter Yard - afreitag)6/30/2015 Slide gate still missing on the LS. WS appears to be in good condition. (DWR Sutter Yard - afreitag)5/29/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/9/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/09/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 Slide gate missing on LS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13H_2011_p_0017 for missing slide gate. (DWR Sutter Yard - omagana) FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 9.2 feet below the crown. Flap gate on the waterside (WS) end. Slide gate on the landside (LS) end. Concrete "U" headwalls located on both WS and LS toes. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 5.85)] FS Date: 11/30/2016 1:36:49 PM					

Photo 3 of 3 : UCIP\_SP\_2017\_51090\_67156.jpg



Headwall and damaged/missing screw gate on LS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	6.12	Rating **	M	Issue No.	55
LM End	6.12	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.521634 °	39.521634 °
				-121.706184 °	-121.706184 °
DWR ID	DWR_MA0013_02_s_2014_55				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Remove the tree limbs from the landside slope.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_55\_20170315\_00015.jpg



View of the tree limbs on the landside slope and toe.

LM Start	6.18	Rating **	M	Issue No.	12
LM End	7.54	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.520843 °	39.502958 °
				-121.706345 °	-121.716953 °
DWR ID	DWR_MA0013_02_s_2012_12				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_12\_20170315\_00004.jpg



View of the agricultural ditch along the toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	7.18	Rating **	M	Issue No.	930
LM End	7.18	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.507570 °	39.507570 °
				-121.713870 °	-121.713870 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51097 DS_ID:17518 EP_NO: 5200B Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 11/18/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/27/2016 Unable to locate.6/30/2015 Unable to locate.5/29/2014 Same as last inspection.12/9/2013 Unable to locate.7/09/2013 Same as last inspection. Unable to locate.4/24/2012 Not found - Need to verify if there are any signs of the structure during next inspection when slopes are cleared. If not will need to coordinate with applicant regarding the fate of this structure. FIELD_STRUCT_DESC: 36-inch corrugated metal irrigation pipe through the levee embankment, unknown depth below the crown. (Permit No. 5200B, 1967 - Richvale Irrigation District) Additional permits related to this structure include Permit No. 5200 and 5200A. FS Date: 11/30/2016 1:58:53 PM					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	8.30	Rating **	M	Issue No.	931
LM End	8.30	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.493850 °	39.493850 °
				-121.724780 °	-121.724780 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51098  
DS\_ID:16413  
EP\_NO: 14704  
Repair Type: Non-Urgent  
Crossing Status: Indicator Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing is in good condition. Unusre on the permit issues below. 11/4/2014 (DWR-Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent. 5/29/2014 Same as last inspection. 12/4/2013 Same as last inspection. 7/09/2013 Same as last inspection. 4/24/2012 Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39). FIELD\_STRUCT\_DESC: Steel fiber optic cable through the levee, approximately 3.5 feet below the crown. The cable section across the channel is attached to the Cherokee Canal Dridge. (Permit No. 14704, 1987 - Sprint) [Additional Reference(s): DWR Levee Log, 1993]  
FS Date: 11/30/2016 1:59:55 PM

LM Start	<b>8.30</b>	Rating **	M	Issue No.	<b>931 (cont)</b>
LM End	<b>8.30</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP\_SP\_2017\_51098\_67191.jpg



Buried cable box located on the LS edge.

Photo 2 of 2 : UCIP\_SP\_2017\_51098\_67192.jpg



WS view cable line attached to highway bridge.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	8.30	Rating **	M	Issue No.	932
LM End	8.30	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.493780 °	39.493780 °
				-121.724840 °	-121.724840 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51099  
DS\_ID:16404  
EP\_NO: 10589A  
Repair Type: Non-Urgent  
Crossing Status: Indicator Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing appears in good condition. Unsure on the permit issues listed below. 11/4/2014 (DWR- Olivia Magana) Need to contact owner to determine whether both communication are still active and same alignment? permit 14704 (LM 8.38) and 10589 (see LM 8.39) Priority changed in Part IX from No Action Needed to Non-Urgent. 5/29/2014 Same as last inspection. 12/4/2013 Same as last inspection. 7/09/2013 Same as last inspection. 4/24/2012 Unable to verify whether this crossing includes both communication cable lines under permit 14704 (LM 8.38) and 10589 (see LM 8.39).  
FIELD\_STRUCT\_DESC: 4-inch steel communication pipe, contains three telephone cables, through the levee, approximately 4 feet below the crown. The cable through the channel is buried approximately 5 feet deep. (Permit No. 10589, 1987 - Pacific Telephone and Telegraph Company [PT&T]) [Additional Reference(s): DWR Levee Log, 1993]  
FS Date: 11/30/2016 2:00:19 PM

LM Start	<b>8.30</b>	Rating **	M	Issue No.	<b>932 (cont)</b>
LM End	<b>8.30</b>	Issue Type +	En	Location *	LS

Photo 1 of 2 : UCIP\_SP\_2017\_51099\_67211.jpg



Buried cable box located on the landside edge.

Photo 2 of 2 : UCIP\_SP\_2017\_51099\_67210.jpg



Waterside view of utility line alignment through levee then attached to bridge.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>9.56</b>	Rating **	A/W	Issue No.	<b>933</b>
LM End	<b>9.56</b>	Issue Type +	Ma	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.477438 °	39.477438 °	
			-121.735200 °	-121.735200 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51103  
DS\_ID:16838  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears to be in good condition. 6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crossing looked in good condition. 5/28/2014 Same as last inspection. 12/4/2013 Same as last inspection. 4/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13F\_2011\_p\_0080 for limited visibility of LS slide gate and WS flap gate. 7/9/2013 Same as last inspection. FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.66)]  
FS Date: 11/30/2016 2:07:49 PM

LM Start	<b>9.56</b>	Rating **	A/W	Issue No.	<b>933 (cont)</b>
LM End	<b>9.56</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51103\_67280.jpg



Overview of levee crown at crossing looking D/S.

Photo 2 of 3 : UCIP\_SP\_2017\_51103\_67285.jpg



View of crossing looking from channel towards WS levee.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	9.56	Rating **	A/W	Issue No.	933 (cont)	
LM End	9.56	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.477438 °	39.477438 °	
				-121.735200 °	-121.735200 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51103						
DS_ID:16838						
EP_NO: N/A						
Repair Type: No Action Needed						
Crossing Status: Found						
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Path to access the WS flap gate was getting overgrown with vegetation but other than that everything with the crossing looked in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.4/24/2012 This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0080 for limited visibility of LS slide gate and WS flap gate.7/9/2013 Same as last inspection.						
FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 11.2 feet below the crown. Crossing drains into Cherokee Canal and is part of the Richvale Irrigation District siphon structure. Slide gate is located on the landside (LS). Flap gate is located on the waterside (WS). Crossing angles to the southwest to a flap gate and headwall located about 60 feet from WS toe. [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.66)]						
FS Date: 11/30/2016 2:07:49 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51103\_67283.jpg



WS view-access well located 60 feet from WS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	9.57	Rating **	A/W	Issue No.	934	
LM End	9.57	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.477335 °		39.477335 °
				-121.735340 °		-121.735340 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51104 DS_ID:16839 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 WS flapgate is silted over and unable to open. Needs to be dug out.5/28/2014 Same as last inspection.12/4/2013 Slopes were cleared of vegetation and are in good condition.7/09/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with cleaned slopes. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flapgate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.68)] FS Date: 11/30/2016 2:09:17 PM						

LM Start	<b>9.57</b>	Rating **	A/W	Issue No.	<b>934 (cont)</b>
LM End	<b>9.57</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51104\_67289.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 1 of 2)

Photo 2 of 3 : UCIP\_SP\_2017\_51104\_67287.jpg



WS view of crossing. Dense vegetation along WS slope limited visual inspection. (WS Photo 2 of 2)

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	9.57	Rating **	A/W	Issue No.	934 (cont)	
LM End	9.57	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.477335 °	39.477335 °	
				-121.735340 °	-121.735340 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51104 DS_ID:16839 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears to be in good condition. 6/30/2015 WS flapgate is silted over and unable to open. Needs to be dug out. 5/28/2014 Same as last inspection. 12/4/2013 Slopes were cleared of vegetation and are in good condition. 7/09/2013 Same as last inspection. 4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of WS and LS slopes during next inspection with cleaned slopes. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 11.5 feet below the crown. Flapgate on the waterside (WS). [Additional Reference(s): USACE Sacramento O&M Manual 519, June 1962 (HLM 9.68)] FS Date: 11/30/2016 2:09:17 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51104\_67286.jpg



View of crossing from LS. Dense vegetation along LS slope limited visual inspection. (LS Photo 1 of 2)

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	9.66	Rating **	M	Issue No.	935
LM End	9.66	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.476260 °	39.476260 °
				-121.736230 °	-121.736230 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51106  
DS\_ID:18912  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Indicator Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. Another marker was found/photographed near the LS toe. Crossing also appears to cross through the Unit1 levee around CLM8.860. (DWR Sutter Yard- A/Freitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information.  
FIELD\_STRUCT\_DESC: Buried communication line of unknown material through the levee at an unknown depth below the crown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601 as indicated by marker. (Qwest Communication) No permit has been identified since crossing was field discovered in 2012.  
FS Date: 11/30/2016 2:11:06 PM

LM Start	<b>9.66</b>	Rating **	M	Issue No.	<b>935 (cont)</b>
LM End	<b>9.66</b>	Issue Type +	En	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51106\_67292.jpg



Overview of levee crown at crossing.

Photo 2 of 3 : UCIP\_SP\_2017\_51106\_67291.jpg



Marker for buried fiber optic cable on WS.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	9.66	Rating **	M	Issue No.	935 (cont)
LM End	9.66	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.476260 °	39.476260 °
				-121.736230 °	-121.736230 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51106 DS_ID:18912 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. Another marker was found/photographed near the LS toe. Crossing also appears to cross through the Unit1 levee around CLM8.860. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing is in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information. FIELD_STRUCT_DESC: Buried communication line of unknown material through the levee at an unknown depth below the crown. Owner of line is Qwest Communications 1-800 At Fiber Sign ID Number 16601 as indicated by marker. (Qwest Communication) No permit has been identified since crossing was field discovered in 2012. FS Date: 11/30/2016 2:11:06 PM					

Photo 3 of 3 : UCIP\_SP\_2017\_51106\_67290.jpg



Marker for buried fiber optic cable on LS with contact information.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	9.67	Rating **	M	Issue No.	936
LM End	9.67	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.476140 °	39.476140 °
				-121.736390 °	-121.736390 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51107  
 DS\_ID:18913  
 EP\_NO: N/A  
 Repair Type: Non-Urgent  
 Crossing Status: Indicator Found  
 UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing appears to be in good condition. But still unknown if this crossing was authorized or unauthorized. 5/28/2014 Same as last inspection. 12/4/2013 Same as last inspection. 7/9/2013 Same as last inspection. 4/24/2012 Authorized/unauthorized encroachment? Contact Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com for additional info. Inquiries pertaining to inspection submit to pipelineinquiries@kindermorgan.com and reference as Engr Station 3173+48 plus include coordinates.  
 FIELD\_STRUCT\_DESC: 8-inch high pressure line bored through through the levee at depth unknown. Kinder Morgan is the owner of line--contact information is 213.624-9461 or Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com. Additional contact is Ken Yeo, Sacramento Local Area Manager, at 916.416.7938 or by email yeok@kindermorgan.com. Frank Villalovos is the primary contact for this crossing. No permit has been identified since crossing was field discovered in 2012.  
 FS Date: 11/30/2016 2:14:24 PM

LM Start	<b>9.67</b>	Rating **	M	Issue No.	<b>936 (cont)</b>
LM End	<b>9.67</b>	Issue Type +	En	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51107\_67295.jpg



Overview of levee crown at crossing.

Photo 2 of 3 : UCIP\_SP\_2017\_51107\_67294.jpg



WS marker with utility contact information.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	9.67	Rating **	M	Issue No.	936 (cont)
LM End	9.67	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.476140 °	39.476140 °
				-121.736390 °	-121.736390 °
DWR ID					

Comment Code
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Inspector Comment
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FS\_ID:51107  
DS\_ID:18913  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Indicator Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing appears to be in good condition. But still unknown if this crossing was authorized or unauthorized. 5/28/2014 Same as last inspection. 12/4/2013 Same as last inspection. 7/9/2013 Same as last inspection. 4/24/2012 Authorized/unauthorized encroachment? Contact Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com for additional info. Inquiries pertaining to inspection submit to pipelineinquiries@kindermorgan.com and reference as Engr Station 3173+48 plus include coordinates.  
FIELD\_STRUCT\_DESC: 8-inch high pressure line bored through through the levee at depth unknown. Kinder Morgan is the owner of line--contact information is 213.624-9461 or Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com. Additional contact is Ken Yeo, Sacramento Local Area Manager, at 916.416.7938 or by email yeok@kindermorgan.com. Frank Villalovos is the primary contact for this crossing. No permit has been identified since crossing was field discovered in 2012.  
FS Date: 11/30/2016 2:14:24 PM

Photo 3 of 3 : UCIP\_SP\_2017\_51107\_67293.jpg



View of LS slope and marker.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	9.69	Rating **	M	Issue No.	937
LM End	9.69	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.475960 °	39.475960 °
				-121.736540 °	-121.736540 °

**Comment Code**

**Inspector Comment**

FS\_ID:51108  
DS\_ID:18914  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Indicator Found  
UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- A Freitag) 4/27/2016 Crossing appears to be in good condition. 6/30/2015 Crossing appears to be in good condition. It is still unknown whether this crossing was authorized or unauthorized. 5/28/2014 Same as last inspection. 12/4/2013 Same as last inspection. 7/09/2013 Same as last inspection. 4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if permit exist for this crossing.  
FIELD\_STRUCT\_DESC: Underground communication cable through the levee, depth unknown below the crown. Owner of encroachment is Pacific Telephone. No permit has been identified since crossing was field discovered in 2012.  
FS Date: 11/30/2016 2:15:27 PM

LM Start	<b>9.69</b>	Rating **	M	Issue No.	<b>937 (cont)</b>
LM End	<b>9.69</b>	Issue Type +	En	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51108\_67299.jpg



Overview of levee crown at crossing.

Photo 2 of 3 : UCIP\_SP\_2017\_51108\_67300.jpg



Marker located on LS.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	9.69	Rating **	M	Issue No.	937 (cont)	
LM End	9.69	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			39.475960 °	39.475960 °	
				-121.736540 °	-121.736540 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51108 DS_ID:18914 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 11/18/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/27/2016 Crossing appears to be in good condition.6/30/2015 Crossing appears to be in good condition. It is still unknown wheter this crossing was authorized or unauthorized.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/09/2013 Same as last inspection.4/24/2012 Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if permit exist for this crossing. FIELD_STRUCT_DESC: Underground communication cable through the levee, depth unknown below the crown. Owner of encroachment is Pacific Telephone. No permit has been identified since crossing was field discovered in 2012. FS Date: 11/30/2016 2:15:27 PM						

Photo 3 of 3 : UCIP\_SP\_2017\_51108\_67298.jpg



Underground cable marker with contact information.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>9.88</b>	Rating **	M	Issue No.	<b>938</b>							
LM End	<b>9.88</b>	Issue Type +	En	Location *	LS							
Category	Supplemental		GPS Latitude/Longitude									
			Start	End								
Item	DWR UCIP Field Study		39.473410 °	39.473410 °								
			-121.738190 °	-121.738190 °								
DWR ID												
Comment Code												
Inspector Comment												
FS_ID:51109 DS_ID:17731 EP_NO: 16994 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 11/18/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/27/2016 Unable to locate.6/30/2015 Unable to locate.5/28/2014 Same as last inspection.12/4/2013 Unable to locate.7/09/2013 Same as last inspection. Unable to locate any signs of this crossing.4/24/2012 Unable to find any indicators for this crossing. It appears that this encroachment was not built. Check again during next inspection. FIELD_STRUCT_DESC: 10-inch high-density polyethylene (HDPE) communication conduit through the levee, unknown depth below the crown. Conduit contains fiber-optic cables that goes across and under (bored) Cherokee Canal and its levees. Twelve inner ducts through casing with hand holes placed at each end for initial and future installation of fiber optic telecommunications cable. (Permit No. 16994, 2000 - Level 3 Comm) FS Date: 11/30/2016 2:15:57 PM												

No Photos

LM Start	<b>10.03</b>	Rating **	M	Issue No.	<b>13</b>							
LM End	<b>10.52</b>	Issue Type +	En	Location *	LS							
Category	Earthen Levee		GPS Latitude/Longitude									
			Start	End								
Item	Encroachments		39.471517 °	39.465113 °								
			-121.739433 °	-121.743592 °								
DWR ID	DWR_MA0013_02_s_2012_13											
Comment Code												
DT : Ditch												
Inspector Comment												

Photo 1 of 1 : SP\_2017\_MA0013\_301\_13\_20170315\_00005.jpg



View of the agricultural ditch along the toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	10.98	Rating **	A	Issue No.	91
LM End	10.98	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.459237 °	39.459237 °
				-121.747393 °	-121.747393 °
DWR ID	DWR_MA0013_02_s_2017_91				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
There is native grasses on both slopes.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_91\_20170508\_00148.jpg



View of native grasses on both slopes.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	12.88	Rating **	M	Issue No.	940
LM End	12.88	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.434779 °	39.434779 °
				-121.763940 °	-121.763940 °

**Comment Code**

**Inspector Comment**

FS\_ID:51112  
DS\_ID:16385  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard- AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13F\_2011\_p\_0147 for limited visibility of LS and WS.  
FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)]  
FS Date: 11/30/2016 2:18:56 PM

Photo 1 of 3 : UCIP\_SP\_2017\_51112\_67336.jpg



Overview of crossing looking downstream at the left bank of Cherokee Canal.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	12.88	Rating **	M	Issue No.	940 (cont)
LM End	12.88	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.434779 °	39.434779 °
				-121.763940 °	-121.763940 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51112 DS_ID:16385 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard- AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of LS and WS. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)] FS Date: 11/30/2016 2:18:56 PM					

Photo 2 of 3 : UCIP\_SP\_2017\_51112\_67337.jpg



Stand pipe with screw gate WS

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	12.88	Rating **	M	Issue No.	940 (cont)
LM End	12.88	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.434779 °	39.434779 °
				-121.763940 °	-121.763940 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51112 DS_ID:16385 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 WS still heavily vegetated and cannot access the WS pipe end for inspection. Vegetation needs to be cleared back. (DWR Sutter Yard- AFreitag)4/26/2016 LS headwall was visible but gate was underwater. WS still heavily vegetated and unable to be inspected. Vegetation needs to be cleared back.6/30/2015 WS heavily vegetated passed the toe-road and could not make it to the WS pipe end for inspection. Vegetation needs to be cleared back. LS pipe end was fully submerged under water.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated.4/24/2012 LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13F_2011_p_0147 for limited visibility of LS and WS. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Slide gate in ditch on the landside (LS). Pipe under channel is a 24-inch siphon. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 13.03)] FS Date: 11/30/2016 2:18:56 PM					

Photo 3 of 3 : UCIP\_SP\_2017\_51112\_67335.jpg



View of the inside of the WS stand pipe. No obstructions blocking slide gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable  N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	13.40	Rating **	M	Issue No.	19
LM End	16.00	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.428192 °	39.414202 °
				-121.768443 °	-121.781863 °
DWR ID	DWR_MA0013_02_s_2012_19				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_19\_20170315\_00007.jpg



View of the agricultural ditch along the toe.

LM Start	15.37	Rating **	M	Issue No.	60
LM End	15.37	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.419957 °	39.419957 °
				-121.772700 °	-121.772700 °
DWR ID	DWR_MA0013_02_f_2016_60				
Comment Code					
V2 : Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comment					
Tules on the landside toe.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_60\_20170315\_00017.jpg



View of dense tules along the landside toe.

\* Location  
LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	15.44	Rating **	M	Issue No.	941
LM End	15.44	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.419209 °	39.419209 °
				-121.773680 °	-121.773680 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51132  
 DS\_ID:16376  
 EP\_NO: N/A  
 Repair Type: Non-Urgent  
 Crossing Status: Found  
 UCIP Comments: 11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- A Freitag) 4/26/2016 LS inlet appears to be buried as could not locate it. WS flap gate was bolted shut. This appears to be an abandoned crossing. 6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection. 12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded. 7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unable to locate LS headwall. 4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0011 for WS gate blocked by vegetation.  
 FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.62)]  
 FS Date: 12/2/2016 9:21:06 AM

Photo 1 of 3 : UCIP\_SP\_2017\_51132\_67341.jpg



Overview of crossing looking downstream at the left bank of Cherokee Canal.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>15.44</b>	Rating **	M	Issue No.	<b>941 (cont)</b>
LM End	<b>15.44</b>	Issue Type +	Ma	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP LMA Responsibility		39.419209 °	39.419209 °	
			-121.773680 °	-121.773680 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51132  
DS\_ID:16376  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- A Freitag) 4/26/2016 LS inlet appears to be buried as could not locate it. Ws flap gate was bolted shut. This appears to be an abandoned crossing. 6/30/2015 Still unable to locate the LS pipe end. 5/28/2014 Same as last inspection. 12/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield flooded. 7/08/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unable to locate LS headwall. 4/24/2012 Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0011 for WS gate blocked by vegetation.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 10.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.62)]  
FS Date: 12/2/2016 9:21:06 AM

LM Start	<b>15.44</b>	Rating **	M	Issue No.	<b>941 (cont)</b>
LM End	<b>15.44</b>	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : UCIP\_SP\_2017\_51132\_67343.jpg



Dense vegetation covering the majority of the WS. WS headwall difficult to see through dense vegetation.

Photo 3 of 3 : UCIP\_SP\_2017\_51132\_67342.jpg



View of WS headwall and flap gate.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	15.68	Rating **	M	Issue No.	942
LM End	15.68	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.417043 °	39.417043 °
				-121.777240 °	-121.777240 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51133  
DS\_ID:16382  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- A Freitag)4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0022 -- unknown issue.  
FIELD\_STRUCT\_DESC: \*ABANDONED\* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)]  
FS Date: 12/2/2016 9:25:24 AM

LM Start	15.68	Rating **	M	Issue No.	942 (cont)
LM End	15.68	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51133\_67352.jpg



Overview of crossing looking downstream of the left bank of Cherokee

Photo 2 of 3 : UCIP\_SP\_2017\_51133\_67351.jpg



View of WS slope. Limited inspection due to the dense vegetation.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	15.68	Rating **	M	Issue No.	942 (cont)
LM End	15.68	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.417043 °	39.417043 °
				-121.777240 °	-121.777240 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51133 DS_ID:16382 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Unable to locate LS pipe end. WS flap gate bolted shut. (DWR Sutter Yard- AFreitag)4/26/2016 Appears to be an abandoned crossing. LS pipe end was still buried and WS flap gate was bolted shut.6/30/2015 LS headwall stil buried somewhere. WS looked to be in good condition.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0022 -- unknown issue. FIELD_STRUCT_DESC: *ABANDONED* 24-inch corrugated metal drainage pipe through the levee, 9 feet below the crown. Flap gate located on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). WS gate bolted shut and LS crossing is non-operable (inlet not found). Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 15.87)] FS Date: 12/2/2016 9:25:24 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_51133\_67350.jpg



View of WS headwall.

LM Start	15.98	Rating **	U	Issue No.	64
LM End	15.98	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.414397 °	39.414397 °
				-121.781596 °	-121.781596 °
DWR ID	DWR_MA0013_02_f_2016_64				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_64\_20170315\_00020.jpg



View of the rodent holes along the landside slope.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>16.02</b>	Rating **	M	Issue No.	<b>65</b>
LM End	<b>16.02</b>	Issue Type +	En	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Encroachments		39.414021 °	39.414021 °	
			-121.782199 °	-121.782199 °	
DWR ID	DWR_MA0013_02_f_2016_65				
Comment Code					
DE : Debris					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	16.07	Rating **	M	Issue No.	943
LM End	16.07	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.413595 °	39.413595 °
				-121.782890 °	-121.782890 °

**Comment Code**

**Inspector Comment**

FS\_ID:51134  
DS\_ID:16377  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking. (DWR Sutter Yard- A Freitag)4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking.6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed. 5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtenances in good condition.4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit. FIELD\_STRUCT\_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.26)]  
FS Date: 12/2/2016 9:36:39 AM

Photo 1 of 3 : UCIP\_SP\_2017\_51134\_67353.jpg



Overview of levee crown.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	16.07	Rating **	M	Issue No.	943 (cont)
LM End	16.07	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.413595 °	39.413595 °
				-121.782890 °	-121.782890 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51134  
DS\_ID:16377  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking. (DWR Sutter Yard- AFreitag)4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking.6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed. 5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit. FIELD\_STRUCT\_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.26)]  
FS Date: 12/2/2016 9:36:39 AM

Photo 2 of 3 : UCIP\_SP\_2017\_51134\_67359.jpg



Appurtances on WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	16.07	Rating **	M	Issue No.	943 (cont)
LM End	16.07	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.413595 °	39.413595 °
				-121.782890 °	-121.782890 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51134  
DS\_ID:16377  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking. (DWR Sutter Yard- AFreitag)4/26/2016 LS headwall was dry and photographed. LS pipe end was about 50% plugged with soil. WS riser box is still cracked and appears to still be leaking.6/30/2015 Bee boxes stacked near the riser box on WS so could not get close enough to see if the leak issue had been fixed. 5/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.12/4/2013 Same as last inspection.7/08/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition.4/24/2012 Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit. FIELD\_STRUCT\_DESC: 36-inch corrugated metal irrigation pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterside (WS) slope. Concrete "U" headwall on the landside (LS). Pipe discharges into distribution box on the WS. Divers on dam in stream. Pump located on the WS berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the LS field. Provision can be made to send water over streambed to irrigation overflow area. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 16.26)]  
FS Date: 12/2/2016 9:36:39 AM

Photo 3 of 3 : UCIP\_SP\_2017\_51134\_67355.jpg



WS view of crossing.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	16.52	Rating **	U	Issue No.	54
LM End	16.52	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.409548 °	39.409548 °
				-121.789668 °	-121.789668 °
DWR ID	DWR_MA0013_02_f_2014_54				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_54\_20170315\_00014.jpg



View of the rodent holes along the waterside slope.

LM Start	16.86	Rating **	M	Issue No.	944
LM End	16.86	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.406410 °	39.406410 °
				-121.794600 °	-121.794600 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51135 DS_ID:16841 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 11/17/2016 Unable to locate. (DWR Sutter Yard-AFreitag)4/26/2016 Unable to locate.6/30/2015 Unable to locate.5/28/2014 Same as last inspection.12/4/2013 Unable to locate.7/08/2013 Same as last inspection. Unable to locate.4/24/2012 Dense vegetation limited inspection will need to verify is an features are still present at this location during the next inspection. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee at approximately 14.5 feet below the crown. Flap gate located on the waterside (WS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 17.06)] FS Date: 12/2/2016 9:37:41 AM					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	16.89	Rating **	M	Issue No.	20
LM End	18.72	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.406217 °	39.389187 °
				-121.794945 °	-121.821233 °
DWR ID	DWR_MA0013_02_s_2012_20				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_20\_20170315\_00008.jpg



View of the agricultural ditch along the toe.

LM Start	17.41	Rating **	N	Issue No.	67
LM End	17.41	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.401331 °	39.401331 °
				-121.802480 °	-121.802480 °
DWR ID	DWR_MA0013_02_f_2016_67				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
Approximately eight stumps on the landside toe.					

No Photos

LM Start	17.53	Rating **	M	Issue No.	68
LM End	17.60	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.400232 °	39.399603 °
				-121.804173 °	-121.805123 °
DWR ID	DWR_MA0013_02_f_2016_68				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Tules on the landside toe.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	17.64	Rating **	M	Issue No.	69
LM End	17.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.399164 °	39.399164 °
				-121.805787 °	-121.805787 °
DWR ID	DWR_MA0013_02_f_2016_69				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_69\_20170315\_00021.jpg



View of slope instability issue along the landside slope.

LM Start	17.90	Rating **	M	Issue No.	70
LM End	17.90	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.396809 °	39.396809 °
				-121.809422 °	-121.809422 °
DWR ID	DWR_MA0013_02_f_2016_70				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_70\_20170315\_00022.jpg



View of the rodent holes along the landside slope.

LM Start	17.93	Rating **	M	Issue No.	71
LM End	17.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			39.396465 °	39.396465 °
				-121.809935 °	-121.809935 °
DWR ID	DWR_MA0013_02_f_2016_71				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_71\_20170315\_00023.jpg



View of the rodent holes along the landside slope.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	18.16	Rating **	A/W	Issue No.	945
LM End	18.16	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.394406 °	39.394406 °
				-121.813180 °	-121.813180 °

**Comment Code**

**Inspector Comment**

FS\_ID:51138  
DS\_ID:16379  
EP\_NO: N/A  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/26/2016 Crossing appears to be in good condition.6/30/2015 Vegetation still present on WS. LS side was underwater during inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope cleared of vegetation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0134 for unknown culvert size on LS and no outlet visible on WS.  
FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainage pipe through the levee, 13.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 18.37)]  
FS Date: 12/2/2016 9:40:13 AM

LM Start	<b>18.16</b>	Rating **	A/W	Issue No.	<b>945 (cont)</b>
LM End	<b>18.16</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51138\_67387.jpg



Overview of crossing looking D/S at left bank of Cherokee Canal.

Photo 2 of 3 : UCIP\_SP\_2017\_51138\_67386.jpg



View of WS slope and berm.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	18.16	Rating **	A/W	Issue No.	945 (cont)
LM End	18.16	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.394406 °	39.394406 °
				-121.813180 °	-121.813180 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51138 DS_ID:16379 EP_NO: N/A Repair Type: No Action Needed Crossing Status: Found UCIP Comments: 11/17/2016 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)4/26/2016 Crossing appears to be in good condition.6/30/2015 Vegetation still presenton WS. LS side was underwater during inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 LS slope cleared of vegetation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0134 for unknown culvert size on LS and no outlet visible on WS. FIELD_STRUCT_DESC: 36-inch corrugated metal drainage pipe through the levee, 13.2 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both ends. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 18.37)] FS Date: 12/2/2016 9:40:13 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_51138\_67390.jpg



View of flap gate located on WS.

LM Start	19.37	Rating **	M	Issue No.	21
LM End	19.92	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.383252 °	39.378192 °
				-121.830565 °	-121.838543 °
DWR ID	DWR_MA0013_02_s_2012_21				
Comment Code					
DT : Ditch					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_21\_20170315\_00009.jpg



View of the agricultural ditch along the toe.

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	19.92	Rating **	M	Issue No.	946
LM End	19.92	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.378198 °	39.378198 °
				-121.838570 °	-121.838570 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51141  
DS\_ID:16375  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Erosion still present at WS headwall. (DWR Sutter Yard- A Freitag) 4/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition. 6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition. 12/4/2013 Same as last inspection. 5/28/2014 Same as last inspection. 7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape. 4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection.  
FIELD\_STRUCT\_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)]  
FS Date: 12/2/2016 9:42:22 AM

LM Start	<b>19.92</b>	Rating **	M	Issue No.	<b>946 (cont)</b>
LM End	<b>19.92</b>	Issue Type +	Ma	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51141\_67401.jpg



Erosion behind WS headwall looking at the downstream edge of headwall.

Photo 2 of 3 : UCIP\_SP\_2017\_51141\_67400.jpg



Erosion behind WS headwall at the upstream edge of headwall.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	19.92	Rating **	M	Issue No.	946 (cont)
LM End	19.92	Issue Type +	Ma	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.378198 °	39.378198 °
				-121.838570 °	-121.838570 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51141 DS_ID:16375 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Erosion still present at WS headwall. (DWR Sutter Yard- A Freitag)4/26/2016 Erosion still present behind the WS headwall. The rest of the crossing appears in good condition.6/30/2015 Erosion still present behind the WS headwall. Everything thing else with the crossing appeared to be in good condition.12/4/2013 Same as last inspection.5/28/2014 Same as last inspection.7/08/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape.4/24/2012 Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 13.1 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 20.15)] FS Date: 12/2/2016 9:42:22 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_51141\_67402.jpg



Flap gate located on the WS.

LM Start	19.94	Rating **	M	Issue No.	72
LM End	20.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.378011 °	39.376318 °
				-121.838859 °	-121.840541 °
DWR ID	DWR_MA0013_02_f_2016_72				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Tules on the landside toe.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	20.43	Rating **	M	Issue No.	6
LM End	20.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.373091 °	39.370795 °
				-121.845225 °	-121.850124 °
DWR ID	DWR_MA0013_02_s_2013_6				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_6\_20170315\_00002.jpg



View of the overgrown trees along the landside slope.

LM Start	20.52	Rating **	M	Issue No.	73
LM End	20.52	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.372486 °	39.372486 °
				-121.846537 °	-121.846537 °
DWR ID	DWR_MA0013_02_f_2016_73				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Remove the tree limbs from the landside slope and toe.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_73\_20170315\_00024.jpg



View of the tree limbs along the landside levee toe.

LM Start	20.65	Rating **	M	Issue No.	52
LM End	20.65	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.371433 °	39.371433 °
				-121.848753 °	-121.848753 °
DWR ID	DWR_MA0013_02_s_2014_52				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Remove the tree limbs from the landside slope and toe.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_52\_20170315\_00012.jpg



View of the tree limbs along the landside toe.

**\* Location**

LS : Land Side    N/A : Not Applicable  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable                      N : Not Inspected/Rated  
M : Minimally Acceptable        C : Corrected  
U : Unacceptable                  A/W : Acceptable but Monitor & Maintain

**+ Issue Type**

Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement





**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>20.76</b>	Rating **	U	Issue No.	<b>947 (cont)</b>
LM End	<b>20.76</b>	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		39.370676 °	39.370676 °	
			-121.850490 °	-121.850490 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51146  
DS\_ID:16383  
EP\_NO: N/A  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - A Freitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - A Freitag)6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - A Freitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - A Freitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - A Freitag)7/8/2013 Same as last inspection. (DWR Sutter Yard - A Freitag)4/19/2012 LS pipe collars severely damaged--section missing at flapgate. Buried section of pipe could be in the same condition. Crossing needs to be repaired; will need to coordinate with applicant. WS slide gate handle missing. (DWR UCIP - omagana)  
FIELD\_STRUCT\_DESC: 1 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)]  
FS Date: 12/2/2016 9:43:00 AM

LM Start	<b>20.76</b>	Rating **	U	Issue No.	<b>947 (cont)</b>
LM End	<b>20.76</b>	Issue Type +	En	Location *	LS

Photo 2 of 3 : UCIP\_SP\_2017\_51146\_67407.jpg



Corrugated metal pipe riser for pipe 1 of 3. Slide gate is missing handle.

Photo 3 of 3 : UCIP\_SP\_2017\_51146\_67409.jpg



Sink hole observed behind WS headwall at the downstream edge of headwall. (Sink hole picture 1 of 2)

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>20.76</b>	Rating **	U	Issue No.	<b>948</b>
LM End	<b>20.76</b>	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		39.370679 °	39.370679 °	
			-121.850500 °	-121.850500 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51145  
DS\_ID:17014  
EP\_NO: N/A  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - A Freitag) 4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - Freitag) 6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - Freitag) 5/28/2014 Same as last inspection. (DWR Sutter Yard - Freitag) 12/4/2013 Same as last inspection. (DWR Sutter Yard - Freitag) 7/08/2013 Same as last inspection. (DWR Sutter Yard - Freitag) 4/24/2012 LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner. (DWR UCIP - omagana)  
FIELD\_STRUCT\_DESC: 2 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)]  
FS Date: 12/2/2016 9:44:00 AM

LM Start	<b>20.76</b>	Rating **	U	Issue No.	<b>948 (cont)</b>
LM End	<b>20.76</b>	Issue Type +	En	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51145\_67416.jpg



WS view of corrugated metal pipe risers .

Photo 2 of 3 : UCIP\_SP\_2017\_51145\_67418.jpg



Riser for pipe 2 of 3.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.	948 (cont)	
LM End	20.76	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			39.370679 °		39.370679 °
				-121.850500 °		-121.850500 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51145 DS_ID:17014 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Crossing has not been repaired yet. pipe ends still shwoing heavy signs of rust and corrosion. (DWR Sutter Yard - AFreitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - afreitag)6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - afreitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - afreitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - afreitag)7/08/2013 Same as last inspection. (DWR Sutter Yard - afreitag)4/24/2012 LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Will need to coordinate with owner. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 2 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterside (WS) slope. Pump structure on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 12/2/2016 9:44:00 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51145\_67415.jpg



View of pipe 2. Pipe 2 diverts flow to pipe 1.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>20.76</b>	Rating **	U	Issue No.	<b>949</b>
LM End	<b>20.76</b>	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		39.370679 °	39.370679 °	
			-121.850500 °	-121.850500 °	
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51144  
DS\_ID:17185  
EP\_NO: N/A  
Repair Type: Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - A Freitag) 4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - Freitag) 6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - Freitag) 5/28/2014 Same as last inspection. (DWR Sutter Yard - Freitag) 12/4/2013 Same as last inspection. (DWR Sutter Yard - Freitag) 7/08/2013 Same as last inspection. (DWR Sutter Yard - Freitag) 4/24/2012 Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner. (DWR UCIP - omagana)  
FIELD\_STRUCT\_DESC: 3 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates in corrugated metal pipe risers on the waterside (WS) slope. Pump structure located on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)]  
FS Date: 12/2/2016 9:44:48 AM

LM Start	<b>20.76</b>	Rating **	U	Issue No.	<b>949 (cont)</b>
LM End	<b>20.76</b>	Issue Type +	En	Location *	LS

Photo 1 of 3 : UCIP\_SP\_2017\_51144\_67441.jpg



View of corrugated metal risers located on WS.

Photo 2 of 3 : UCIP\_SP\_2017\_51144\_67443.jpg



View of corrugated metal pipe for pipe 3 of 3.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	20.76	Rating **	U	Issue No.	949 (cont)
LM End	20.76	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.370679 °	39.370679 °
				-121.850500 °	-121.850500 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51144 DS_ID:17185 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - A Freitag)4/26/2016 No repairs have been made at this crossing yet. (DWR Sutter Yard - a Freitag)6/30/2015 Crossing has not been repaired yet. pipe ends still showing heavy signs of rust and corrosion. (DWR Sutter Yard - a Freitag)5/28/2014 Same as last inspection. (DWR Sutter Yard - a Freitag)12/4/2013 Same as last inspection. (DWR Sutter Yard - a Freitag)7/08/2013 Same as last inspection. (DWR Sutter Yard - a Freitag)4/24/2012 Sink hole present on WS. LS pipe collars severely damaged--section missing at flapgate. Crossing needs repair. Need to coordinate with owner. (DWR UCIP - omagana) FIELD_STRUCT_DESC: 3 of 3: 16-inch steel irrigation pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates in corrugated metal pipe risers on the waterside (WS) slope. Pump structure located on the WS end. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.00)] FS Date: 12/2/2016 9:44:48 AM					

Photo 3 of 3 : UCIP\_SP\_2017\_51144\_67442.jpg



View of Pipe 3 of 3 from WS headwall.

LM Start	20.77	Rating **	M	Issue No.	75
LM End	20.77	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			39.370641 °	39.370641 °
				-121.850572 °	-121.850572 °
DWR ID	DWR_MA0013_02_f_2016_75				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_75\_20170315\_00025.jpg



View of the erosion along the waterside toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	21.35	Rating **	M	Issue No.	950
LM End	21.35	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.366155 °	39.366155 °
				-121.859880 °	-121.859880 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51147  
DS\_ID:16384  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0234 for no WS gate but sluice gate present.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of exisiting pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]  
FS Date: 12/2/2016 9:56:00 AM

Photo 1 of 3 : UCIP\_SP\_2017\_51147\_67447.jpg



Overview of crossing looking downstream.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	21.35	Rating **	M	Issue No.	950 (cont)
LM End	21.35	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.366155 °	39.366155 °
				-121.859880 °	-121.859880 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51147  
DS\_ID:16384  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0234 for no WS gate but sluice gate present.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of exisiting pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]  
FS Date: 12/2/2016 9:56:00 AM

Photo 2 of 3 : UCIP\_SP\_2017\_51147\_67451.jpg



View of WS daylight. Hole present at pipe daylight.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	21.35	Rating **	M	Issue No.	950 (cont)
LM End	21.35	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.366155 °	39.366155 °
				-121.859880 °	-121.859880 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51147  
DS\_ID:16384  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 Pipe section that crosses through the levee appears to be in good condition. (DWR Sutter Yard - AFreitag)4/26/2016 Pipe appears to have been repaired. Not sure on the extent of the repairs or if they were approved by the Central Valley Flood Control Board.6/30/2015 Pipe is currently undergoing repairs. Not sure what all is planed to be fixed but will update the photos and inspection report with new details when its completed.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair.4/24/2012 Needs repair. Internal piping, severe corrosion. Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0234 for no WS gate but sluice gate present.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe (CMP) riser on the waterside (WS) slope. Pipe crosses the channel. Corroded section of exisiting pipe, 9-foot and 8-inch of an 18-inch corrugated metal pipe section, was replaced under Permit 7231 prior to 1974. (Permit No. 7231, 1960 - Estate of Walter L. King) [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 21.60)]  
FS Date: 12/2/2016 9:56:00 AM

Photo 3 of 3 : UCIP\_SP\_2017\_51147\_67450.jpg



WS-view of internal pipe with severe corrosion-holes present along pipe wall.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	21.83	Rating **	M	Issue No.	951
LM End	21.83	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.362378 °	39.362378 °
				-121.867350 °	-121.867350 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:51149  
DS\_ID:16394  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - AFreitag)4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS and LS slopes are in good condition.7/08/2013 Same as last inspection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0251 for no outlet visible on WS.  
FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.08)]  
FS Date: 12/2/2016 9:58:16 AM

LM Start	<b>21.83</b>	Rating **	M	Issue No.	<b>951 (cont)</b>
LM End	<b>21.83</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : UCIP\_SP\_2017\_51149\_67462.jpg



Overview of crossing looking upstream at the left bank of Cherokee Canal.

Photo 2 of 3 : UCIP\_SP\_2017\_51149\_67460.jpg



View of WS headwall.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	21.83	Rating **	M	Issue No.	951 (cont)	
LM End	21.83	Issue Type +	Ma	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			39.362378 °		39.362378 °
				-121.867350 °		-121.867350 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51149 DS_ID:16394 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 WS flap gate is really rusted and deteriorated but it appears to still function properly. (DWR Sutter Yard - A/Freitag)4/26/2016 WS flap gate is really rusted and deteriorated. May need to be replaced. The rest of the crossing appeared in good condition.6/30/2015 Crossing is in good condition. No noticeable issues to be reported.5/28/2014 Same as last inspection.12/4/2013 WS ans LS slopes are in good condition.7/08/2013 Same as last inpection.4/24/2012 Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE_CESPK_M13E_2011_p_0251 for no outlet visible on WS. FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 11.6 feet below the crown. Flap gate on the waterside (WS) end. Concrete "U" headwalls on both WS and landside (LS). Rusted gate located on the WS (gate stuck). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.08)] FS Date: 12/2/2016 9:58:16 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51149\_67461.jpg



Flap gate located on WS.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	21.86	Rating **	M	Issue No.	952
LM End	21.86	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			39.362103 °	39.362103 °
				-121.867820 °	-121.867820 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:51151 DS_ID:16374 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: 11/17/2016 Splice box still present at LS toe. (DWR Sutter Yard - A Freitag) 4/26/2016 Communication Splice box was still present. Not sure what was done to ever resolve the encroachment issue.6/30/2015 Same as last inspection.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection.4/24/2012 Unauthorized Encroachment. This crossing is listed multiple times in the USACE Periodic Inspection report as USACE_CESPK_M13E_2011_p_0307, 0315, 0317, 0318 for slope failure on LS hinge. DWR-Flood Maintenance Office records shows that CVFPB has requested AT&T to remove conduit in June 2, 2009 letter. LMA working with CVFPB to resolve. FIELD_STRUCT_DESC: *ILLEGAL ENCROACHMENT* Underground telephone cable through the levee. Depth unknown. (AT&T) START latitude 39.36210336, longitude -121.8678207 END latitude 39.35458541, longitude -121.8823409. Line extends from Gridley Colusa Highway to the south end of project levee along landside (LS) shoulder and levee crown hinge point. Levee sloughs along cable trench after heavy rains. [Additional Reference(s): DWR Levee Log, 1993] FS Date: 12/2/2016 10:00:38 AM					

Photo 1 of 1 : UCIP\_SP\_2017\_51151\_67480.jpg



View of utility line located on LS toe.

LM Start	21.87	Rating **	U	Issue No.	59
LM End	22.09	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.362022 °	39.360294 °
				-121.867949 °	-121.871339 °
DWR ID	DWR_MA0013_02_s_2016_59				
Comment Code					
DT : Ditch					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	22.02	Rating **	M	Issue No.	63
LM End	22.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.360842 °	39.360322 °
				-121.870300 °	-121.871318 °
DWR ID	DWR_MA0013_02_s _ 2017_63				
Comment Code					
T3 : Trim and thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					
Trim the trees along the landside toe for visibility.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_63\_20170508\_00149.jpg



View of the trees along the landside toe.

LM Start	22.03	Rating **	A/W	Issue No.	58
LM End	22.03	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.360747 °	39.360747 °
				-121.870493 °	-121.870493 °
DWR ID	DWR_MA0013_02_s _ 2016_58				
Comment Code					
V7 : Trees / Woody Vegetation					
Inspector Comment					
Fallen tree on LS slope					

No Photos

LM Start	22.07	Rating **	M	Issue No.	4
LM End	22.13	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.360410 °	39.359920 °
				-121.871125 °	-121.872067 °
DWR ID	DWR_MA0013_02_s _ 2012_4				
Comment Code					
V6 : Landscaping					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_4\_20170315\_00001.jpg



View of landscaping along the toe.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	



## Levee Inspection Report By Mile - Spring 2017

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	<b>22.15</b>	Rating **	M	Issue No.	<b>953 (cont)</b>
LM End	<b>22.15</b>	Issue Type +	Ma	Location *	LS

View of WS slope looking from WS headwall to levee crown.

* Location	** Rating	+ Issue Type
LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	22.15	Rating **	M	Issue No.	953 (cont)	
LM End	22.15	Issue Type +	Ma	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			39.359827 °	39.359827 °	
				-121.872300 °	-121.872300 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:51154 DS_ID:16391 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 11/17/2016 Unable to locate LS pipe end. Ws appears to be in good condition. (DWR Sutter Yard - A/Freitag)4/26/2016 Still unable to locate the LS headwall and end of pipe. Pipe is still being used. Pipe was draining to WS.6/30/2015 Still unable to locate the LS headwall and pipe end.5/28/2014 Same as last inspection.12/4/2013 Same as last inspection.7/08/2013 Same as last inspection. Unable to locate LS headwall.4/24/2012 Unable to locate LS headwall. Need photo of LS headwall during next inspection. FIELD_STRUCT_DESC: 30-inch corrugated metal drainage pipe through the levee, 15.3 feet below the crown. Concrete "U" headwalls on both waterside (WS) and landside (LS) ends. Flap gate on the WS end. This pipe runs on an angle through the levee, then underground along the LS slope to historic levee mile (HLM) 22.39 where it enters a ditch on the LS. [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 519, June 1962 (HLM 22.41)] FS Date: 12/2/2016 10:02:34 AM						

Photo 3 of 3 : UCIP\_SP\_2017\_51154\_67497.jpg



View of flap gate on WS.

LM Start	22.16	Rating **	M	Issue No.	8
LM End	22.16	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			39.359707 °	39.359707 °
				-121.872555 °	-121.872555 °
DWR ID	DWR_MA0013_02_s_2012_8				
Comment Code					
PR : Prunings					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_8\_20170315\_00003.jpg



View of the debris and prunings along the landside toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable  N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	22.33	Rating **	A/W	Issue No.	62
LM End	22.33	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.358419 °	39.358419 °
				-121.875088 °	-121.875088 °
DWR ID	DWR_MA0013_02_s_2016_62				
Comment Code					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_62\_20170315\_00018.jpg



View of slope instability issue along the landside slope.

LM Start	22.37	Rating **	M	Issue No.	76
LM End	22.37	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.358018 °	39.358018 °
				-121.875815 °	-121.875815 °
DWR ID	DWR_MA0013_02_f_2016_76				
Comment Code					
T2 : Thin trees to allow visibility of the ground and room to flood fight.					
Inspector Comment					

No Photos

LM Start	22.54	Rating **	M	Issue No.	77
LM End	22.54	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.356775 °	39.356775 °
				-121.878417 °	-121.878417 °
DWR ID	DWR_MA0013_02_f_2016_77				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_77\_20170315\_00026.jpg



View of slope instability issue along the landside slope.

\* Location  
LS : Land Side N/A : Not Applicable  
WS : Water Side  
CR : Crown

\*\* Rating  
A : Acceptable N : Not Inspected/Rated  
M : Minimally Acceptable C : Corrected  
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type  
Ma : Maintenance Deficiency  
Ob : Design & System Obsolescence  
En : Enforcement

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2017**

**Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	05/04/2017 05/04/2017	Bob Duffey

LM Start	22.58	Rating **	U	Issue No.	66
LM End	22.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			39.356423 °	39.356423 °
				-121.879110 °	-121.879110 °
DWR ID	DWR_MA0013_02_s_2017_66				
Comment Code					
S1 : Repair slope instability.					
Inspector Comment					
Repair the erosion along the landside slope.					

Photo 1 of 1 : SP\_2017\_MA0013\_301\_66\_20170508\_00150.jpg



View of the erosion along the landside slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable  N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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